

Everything you need to know about Stockholm's new Metro



The Metro map of the future



Twenty kilometres and ten entirely new stations

Stockholm's Metro is about to be expanded. A necessary expansion for those of us who live and work in the region. We need to get to our destination quickly and with least possible hassle, all the while keeping sustainably in mind. The new Stockholm Metro is a vital prerequisite for all the new jobs that are being created in the region and all the new housing that is being constructed.

Stockholm is one of the fastest growing metropolitan regions in Europe. The region's population increases by the equivalent of two full bus loads each and every day. The increase is due to new births and people moving into the region. The increase in population calls for more housing and an expansion of public transport.

A joint initiative for everyone in Stockholm

In January 2014, an agreement was signed by the government, Stockholm County Council, the city of Stockholm and the municipalities of Nacka, Solna and Järfälla. The 2013 Stockholm Negotiation on Housing and Infrastructure means that the Metro would be extended to Nacka, Arenastaden in Solna and Barkarby in Järfälla, and that the Blue line would be extended and connected to the Hagsätra branch. There is also a requirement for depot capacity to be extended so as to service the new trains. Stockholm County Council is responsible for the entire development. Under the agreement, the municipalities will also build 78,000 new residences in the Metro's catchment area.

When will it be ready?

According to plans, building will start in 2018 on the Metro to Barkarby and Arenastaden. Building the Metro to Nacka and the southern suburbs is planned to start at the beginning of 2019. The construction work will take around 6 years for the line to Barkarby and Arenastaden, and 7–8 years for the line to Nacka and the southern suburbs. But before the major construction work can commence, railway plans are required specifying sections of the lines and station entrances/exits. In addition, an authorisation pursuant to the provisions in the Swedish Environmental Code, which governs disturbances and the effects on groundwater while the construction is underway, is required. Detailed plans are also required for



There will be **35,000–40,000** more of us in Stockholm every year.



SEK **28.6 billion**. That is what the national government, Stockholm County Council, Järfälla Municipality, Nacka Municipality, Solna City and the City of Stockholm as well as the National Transport Administration have agreed on for the project.



1,100,000 passengers a day. That is the present ridership level of the Metro.



170,000 will board every day. That's what the increased capacity of the expanded Metro will be able to handle.



78,000 new residences will be built along the new Metro.



150 artists have created the artistic expressions in the existing Metro. Work is now underway to create unique extraordinary artistic expressions for the new stations.

the areas that will be affected. If there is an appeal against issuance of the permit, there will be a delay to the start of construction and thereby also to the start of train services.

Metro to Barkarby Station

The Blue line will be extended from Akalla to Barkarby Station in the municipality of Järfälla. This section will be completely below ground and will have two new stations: Barkarbystaden Station and Barkarby Station. The new Metro will make it easier to travel from workplaces in Kista to Barkarby Station and to other locations in Stockholm.





Barkarbystaden

A completely new district is growing in Järfälla: Barkarbystaden. Between now and 2030, 140 construction projects with 18,000 housing units, and 10,000 workplaces will be built on the old Barkarby airfield and in Veddesta.

The development of the Metro is a prerequisite for the development of this area. The station in Barkarbystaden will have two entrances, centrally located in the area.

Barkarby Station

Barkarby Station will be developed into a new hub where passengers can easily change between the commuter line, the Metro and buses. In the future, regional trains from Mälardalen will also be able to stop here.

The new station will have an entrance close to the commuter rail line, the Mälär line and the future bus terminal. Provision will be made for an entrance from Veddesta, which will be completed when the development of the housing planned for there is ready for occupancy.

FACTS

- The Metro will be extended by about 4 kilometres.
- All rail tunnels will be built below ground.
- Barkarby Station will be about 30 metres below ground level.
- 710,000 m³ of rock will be blasted.
- 32,000 m³ of concrete will be used.
- Planned construction start is 2018.
- Construction will take around 6 years.

[Learn out more at nyatunnelbanan.sll.se/barkarby](http://nyatunnelbanan.sll.se/barkarby)

2,000 passengers will be boarding each hour at Barkarbystaden in the rush hours, by 2030.

9 minutes – the journey time between Barkarby Station and Kista.

17 minutes – the journey time between Barkarby Station and Solna Centre.

Metro to Arenastaden

From Odenplan, a completely new Yellow line will be built. The entire section to Arenastaden will be below ground, with two new stations: Hagastaden and Arenastaden. Preparations are made for an additional station in Hagalund in the future.





Odenplan

Odenplan will become an even more important hub for public transport, where it will be easy to transfer to and from commuter trains, the Metro and buses. The new Yellow line will continue on the Green line track towards the southern suburbs to Farsta Strand or Skarpnäck.

Hagastaden

In the new district of Hagastaden, Stockholm and Solna are growing together. A hospital, schools, a research institute, offices, residences and cultural and service centres will be built here. In total, there will be 50,000 new workplaces and 6,000 new residences.

The new Hagastaden Metro station will have two access points, providing four entrances in total. The entrances to the north will face Hagaplan, the Karolinska Institute and the main entrance to New Karolinska Solna. The southern entrance will face Torsplan.

Hagalund

Hagalund is one of Solna's development areas, where thousands of residences will be built, together with new workplaces and services. Provision will be made here for a future Metro station.

Arenastaden

In Arenastaden, the new Metro line will have a northern entrance close to the Friends Arena and Mall of Scandinavia. A southern entrance is planned near northern Hagalund where it will be easy to change to the Light Rail service.

The location of the station will enable the Yellow line to be extended northwards in the future.

FACTS

- The Metro will be extended by 4.1 kilometres.
- All rail tunnels will be built below ground.
- Arenastaden Station will be 30 metres below ground level.
- 800,000 m³ of rock will be blasted.
- 37,000 m³ of concrete will be used.
- Planned construction start is 2018.
- Construction will take around 6 years.

Find out more at nyatunnelbanan.sll.se/arenastaden

4,300 passengers an hour will be boarding in the rush hour at Hagastaden by 2030.

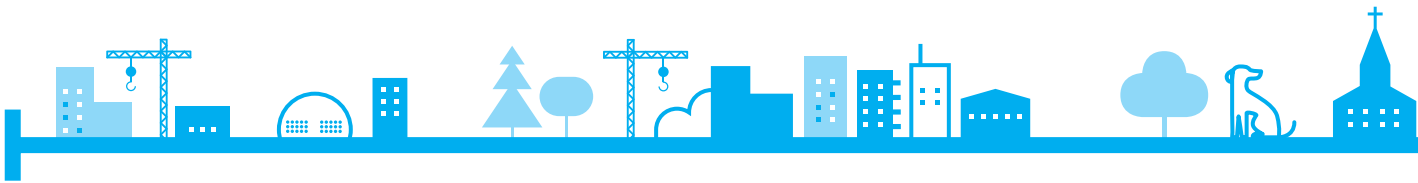
4.5 minutes – the journey time between Arenastaden and Odenplan.

17.5 minutes – the journey time between Gullmarsplan and Arenastaden.

Metro to Nacka and the southern suburbs

The Blue Metro line will be extended southwards from Kungsträdgården to Nacka and the southern suburbs. This entire section will be below ground. The following stations will be built along the line towards central Nacka: Sofia, Hammarby Kanal, Sickla and Järsla. The branch towards the southern suburbs will run from Sofia to Gullmarsplan and on via the Slakthus area to Sockenplan. There it will connect with the present Hagsätra branch, which will become part of the Blue line.





More residences and more traffic to both Nacka and the southern suburbs

Between now and 2030, about 56,000 new residences will be built in eastern Södermalm, in Nacka and the southern suburbs. The extension of the public transport network is also a prerequisite for this development. Building a new link between northern and southern Stockholm under Saltsjön and Södermalm will take some of the load off the Slussen – T-Centralen section and it will be possible to have more frequent departures on all the southbound lines.

Sofia

The new section of Metro under Saltsjön will be constructed entirely through rock and the passage under Saltsjön will be very deep. This means that the Sofia Station will be about 100 metres below ground level. Instead of escalators, there will be large express lifts to convey passengers up or down in about 30 seconds.

Hammarby Kanal

A new station will be built under Hammarby Kanal. There will be one entrance in Södermalm and another in Hammarby Sjöstad, with easy connections to the Light Rail at Luma.

Sickla

A new station will be built at Sickla with two entrances on either side of Värmdövägen. This will make it easy to reach the shopping areas and new housing, cultural attractions and services. Sickla will also become an important hub for public transport. It will be possible to change between the Metro, Light Rail, the Saltsjö line, and buses.

Järla

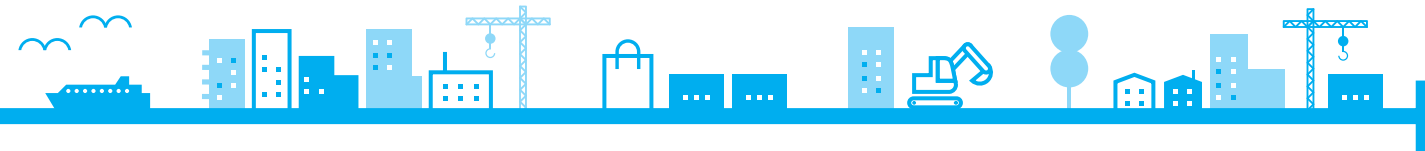
A station is planned in Järla close to new and existing residences, workplaces and schools.

Central Nacka

Central Nacka will be developed, with many new residences and social services. The station at Nacka will have two entrances towards Nacka Forum and the residential areas. A new bus terminal is planned alongside the station, to make changing between Metro and buses as easy as possible.

Gullmarsplan

Gullmarsplan will be an important interchange between the Yellow, Blue and Red lines, the Light Rail and buses. The new Metro will have a new platform 70 metres below ground level, with large express lifts up to the present station. The other end of the new platform will have an entrance in Mårtensdal, where new residences and workplaces are being built. There will be escalators and normal lifts here.



The Slakthus area

The Blue line to the southern suburbs will run via the Slakthus area, where new workplaces and 3,000–4,000 new residences are planned. The new station in the Slakthus area will replace the present stations at Globen and Enskede Gård.

Sockenplan

The deep tunnel below Saltsjön means that the new track cannot be connected with the present Hagsätra branch until Sockenplan. Otherwise the gradient would be too steep. There will be no changes from Sockenplan and southwards to Hagsätra.

FACTS

- The Metro will be extended by some 11.5 kilometres.
- All rail tunnels will be built below ground.
- 2,100,000 m³ of rock will be blasted.
- 160,000 m³ of concrete will be used.
- Planned construction start is 2018–2019.
- Construction will take 7–8 years.

Find out more at nyatunnelbanan.sll.se/nackasoderort

3,800 passengers will be boarding every hour in Nacka centrum during the rush hours, by 2030.

1,400 passengers will be boarding the Blue line each hour at Gullmarsplan in the rush hours, by 2030.

12 minutes – the journey time between central Nacka and T-Centralen.

10 minutes – the journey time between Sockenplan and T-Centralen.



New trains will need new depots

When the Metro is extended there will also be more trains. Trains need to be parked and they need maintenance, which is done in depots. Because the depot spaces that presently exist are insufficient to meet the needs of the expansion, more will need to be built.

The Högdalen depot is being extended

At present there is a large depot and workshop in Högdalen. This will be extended with new staging areas, mainly below ground. Because the Hagsätra branch will be part of the Blue line, it is important to have a depot that can service trains on both the Blue and the Green line.

The depot will therefore be linked to the Green line's Farsta branch between Gubbängen and Hökarängen stations by building a new connecting tracks below ground.

The County Council is also responsible for purchasing the new trains that will run on the new Metro lines.

IT IS PROJECTED THAT

- 2.5 km connecting tracks.
- The staging areas and connecting line will primarily be below ground.
- The staging tracks in Högdalen are 20 metres below ground level.
- 200,000 m³ of rock will be blasted.
- Planned construction start is 2018.
- Construction is expected to take around 5 years.

Find out more at nyatunnelbanan.sll.se/depa

1,500 metres of new staging track will be built below ground.

14 new stabling tracks will be built in Högdalen.

1 new workshop places for train maintenance on the Green and Blue lines.



A complicated project with some major challenges

Building twenty kilometres of new track and ten new stations, as well as extending the station at Gullmarsplan, is complex and challenging work. Not least because everyday life must proceed as normally as possible for all those who will be affected.

At s great depth

Deep in the rock below Saltsjön, we are building a tunnel that will lead southwards from Kungsträdgården Station.

The rock in Stockholm is generally of good quality, but fissure zones in this area and high water pressure from Saltsjön impose severe requirements for sealing and stabilising the tunnels. Several building methods will be used in parallel.

New station solutions

The new, ultra-deep stations at Sofia and Gullmarsplan will demand new solutions that have never been used before on the Stockholm Metro. For example, we will be installing express lifts instead of escalators.

Much existing infrastructure is below ground

Stockholm below ground has a complex mixture of various installations and infrastructure, all of which we must take into account when the Metro is extended. There is everything from pipes, cables and wastewater systems to road tunnels.

Accessibility in the City

Developing the Metro in the city centre is a challenge. Transport to and from the construction sites must be carried out in such a way so as to minimise the impacts on daily life as little as possible. At various times during the construction period, car traffic, pedestrians and cyclists will all be affected. Accessibility for public transport, pedestrians and cyclists will be the priority, while car traffic may need to be rerouted.

Journeys must work

The Metro is an artery for Stockholm, carrying more than a million passengers a day. The closures that will be necessary at times during the construction period must be carefully planned so as to have as little effect as possible and to enable replacement services to operate.

Disturbance during the construction period

Obviously the development of the Metro will be noticed, but the aim is aim is for day-to-day life to carry on as normally as possible during the whole construction period. Those who are directly affected will receive information in good time, and where needed we will take measures to limit noise and protect vulnerable buildings. Where necessary, alternative accommodation will be available during the noisiest periods.

Focus on sustainability

The issue of sustainability permeates all work on the new Metro, from the planning and construction phases until the new Metro is in operation. The new Metro must satisfy both current requirements and those of generations to come, in terms of environmental, social and economic sustainability. Clear goals, structure and follow-up are the keys to successful work on sustainability, as are skilled and aware employees.

By setting requirements for materials, design and working methods in our procurements, the development's impact on the environment can be reduced. But there are also requirements for social and economic sustainability, such as requirements for the working environment and business ethics. Good, close collaboration between us as employers and our contractors is the basis for success.

Passengers are at the centre

From a sustainability point of view, it is vital that the new Metro is useful for many people and helps shape new travel habits. For this reason, we put the needs of passengers and people at the centre when planning the development. A dialogue and collaboration with the various passenger groups is important for

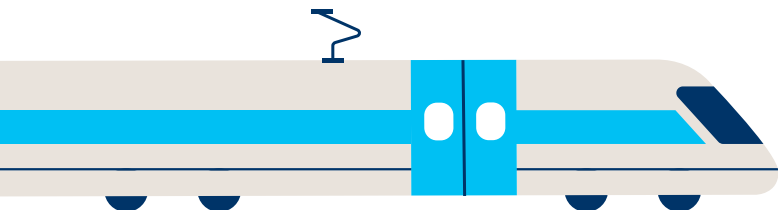
identifying their wishes and needs. Our aim is to make the new Metro accessible and safe for all passengers.

A safe and secure environment during the construction period

The needs and perspectives of children is an important social aspect, since the development of the Metro will extend over a long period in relation to a child's youth. As part of planning, we are gathering facts for dialogue with young people in the immediate vicinity. What do they consider to be important for them, in relation to the Metro expansion? What are their routes to school like? This assists us in establishing a safe and secure environment for all segments of the population, so that children will be able to also move around independently.

IT IS PROJECTED THAT

- The County Council's Extended Metro Administration is environmentally certified in accordance with ISO 14 001. The project actively works with the CEEQUAL sustainability model, so as to implement the development sustainably.
- We use climate calculations to monitor the climate impact of stations right from the design stage.
- The project's sustainability coordinator provides support and monitors sustainability issues in every project.



Public transport will also be better here

Stockholm City Line

The Stockholm City Line is a six-kilometre commuter train tunnel running under central Stockholm, with two new stations at Odenplan and T-Centralen. Thanks to the Stockholm City Line, commuter trains have two tracks of their own, which means that both commuter and long-distance trains can have more departures and be more punctual.

Light Rail, Sickla

The Light Rail is being extended from Sickla Udde to Sickla. In this way the Light Rail becomes part of the new hub in Sickla where the Saltsjö line and the future Metro will also meet.

Commuter trains

When the new City Line opens, Stockholm will also receive 46 new, modern commuter trains.

The Roslag line

Work on modernising the Roslag line is in full swing. More double-track line is being built here and accessibility, safety and noise protection will be improved along the entire line. Stations and existing carriages are also being refurbished, new trains are being purchased and a new depot is being built.

The Red line

The old trains on the Red line are being replaced by new, more modern and more comfortable carriages.

The signalling system is being upgraded and a new depot is being built in Norsborg.

The Saltsjö line

The Saltsjö line is undergoing technical refurbishment so as to meet future needs for safety, accessibility and more frequent departures. Work is also being carried out to reduce noise.

Light Rail, Kista

The Light Rail is being extended in north-western Stockholm to new stations in Kista and Helenelund.

Slussen

A new, modern bus terminal is planned at Slussen for the Nacka and Värmdö buses, as well as double track for the Saltsjö line. During the construction period, Henriksdal will be the terminus of the Saltsjö line and a temporary bus terminal for the Nacka and Värmdö buses will be built by the Slussen quay.

Future initiatives

At the time of writing, further discussions are going on with regard to further initiatives for public transport in the Stockholm region. This is within the framework of the National Negotiation on Housing and Infrastructure in Sweden.

Find out more at sverigeforhandlingen.se.

We are presently building twenty kilometres of new Metro line and ten new stations in an effort to make the day-to-day lives of Stockholm's residents go much smoother.

The extended Metro is needed because Stockholm is growing at a rapid pace. The county's population is increasing by approximately 35,000-40,000 people each year, and is expected to reach as much as 2.6 million by 2030. Already, 20 percent of the country's population reside on 2 percent of its land area. This leads to congested roads and cramped public transport and makes it difficult to find somewhere to live.

Fully functional public transport is needed to allow more residences with good communications to be built so that the region can continue to grow in a sustainable way. An extended Metro to Barkarby Station, Arenastaden, Nacka and the southern suburbs of Stockholm, also contributes to linking the region together.

78,000 new residences will also be built close to the Metro in the municipalities of Solna City, Järfälla Municipality, Nacka City as well as the City of Stockholm.

The 2013 Stockholm Negotiation

A joint initiative by the Stockholm County Council, Järfälla Municipality, Nacka City, Solna City and the City of Stockholm along with the National Transport Administration.