

First-class cycling  
Bicycle policy plan 2015-2019

# Antwerp World-class cycle city





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# Antwerp, World-class cycle city

## First-class cycling

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Over the past years, Antwerp has developed into a **real cycle city**. And this has not gone unnoticed. Antwerp was crowned Flemish Cycle City in 2012, made its way onto the Copenhagenize index in 2013 and was recently nominated for the title of Cycle City 2015. The city is determined to continue its efforts and even raises the stakes. We are convinced that we have what it takes to become a world-class cycle city and we want to do everything we can to maximise this potential in the coming years with our bicycle policy plan and bicycle action plans.

Of course we are not alone in this endeavour. We have a multitude of **partners**: Flanders, the province of Antwerp, the districts, neighbouring municipalities, the Flemish public transport company (De Lijn), the national railway company (NMBS), the Flemish company for regional mobility projects in Antwerp (BAM), the Flemish agency for roads and traffic (AWV) and numerous institutions and organisations working and speaking for cyclists, road safety, less mobile persons ... We want to work on cross-border projects in a city-regional context whenever possible, but we also want to engage in a dialogue with (potential) cyclists themselves and involve the residents, entrepreneurs and visitors of Antwerp in our bicycle policy.

Our cycling policy comprises **three layers**. Firstly, the bicycle policy is a refinement of the **city's**

**mobility plan**. The **bicycle policy plan** itself is a preliminary translation of the cycling ambitions in the mobility plan and formulates the vision, level of ambition and fundamental guidelines for the bicycle policy in the medium term. The bicycle policy plan is detailed further in **bicycle action plans** which are updated on a regular basis. These three layers have to be read together to get a full appreciation of the city of Antwerp's bicycle policy.

The bicycle policy plan itself consists of **three parts**. The first part identifies the challenges and formulates the vision for the city's bicycle policy. The challenges are in great part the same as the ones we take on with our mobility plan: accommodating the growth of the population, stimulating our economy and expanding the capacity of our networks. Evidently, the bicycle policy plan subscribes to the mobility plan's vision for an active and accessible city. And in striving to offer world-class quality to cyclists, the policy plan leaves nothing to the imagination in terms of the level of ambition.

Secondly, the bicycle policy plan zooms in on the most important **infrastructural keys** to develop a first-class cycle network. More particularly: solving missing links in our cycle networks, creating 'super links' at multimodal hubs and implementing an active and proactive bicycle parking policy. These



measures all contribute to a logical, legible and comfortable network of cycle routes.

The third and last part of the bicycle policy plan formulates a comprehensive package of **supporting measures and initiatives** to facilitate the optimal use of this network. The city of Antwerp wants to reward the choice for the bicycle by prioritising

safety as an absolute priority, by guaranteeing accessibility through a positive roadworks policy and by introducing and supporting a variety of initiatives that help promote a city-wide bicycle culture. The city wants to enable and entice as much people as possible to opt for the bicycle and to experience a bicycle ride in Antwerp as a journey in first class.

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# Challenges

## Vision

# Ambition

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*Antwerp identified three main challenges in its mobility plan: a growing population, an economy that needs to grow along and the need to increase capacity. While focusing on the role of the bicycle in an active and accessible city, the bicycle policy faces the same challenges. But the bicycle policy plan goes further and wants to acquire a permanent place for Antwerp in the leading 'peloton' of bicycle-friendly cities. In order to reach this goal we have to continue our investments in a first-class cycle network. Supporting measures for safety, legibility and comfort have to make sure that a choice for the bicycle is the best guarantee for a first class journey.*

# Part 1



# Growth, economy, capacity

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In recent years Antwerp has seen a **strong population growth**. In 2012 the city passed the milestone of 500.000 residents. In 2014 there were almost 15.000 more. The composition of the population is changing as well with, for example, a considerable increase in the shares of 0-to-9-year-olds and 80-plus citizens. These trends add to the already sharply risen number of cyclists and further expand groups of vulnerable traffic participants. The population growth also means that we have to be even more careful with the available space in the city. Seeing as endlessly expanding the cycle network is not an option we need to come up with simple yet smart solutions specifically for bicycle infrastructure.

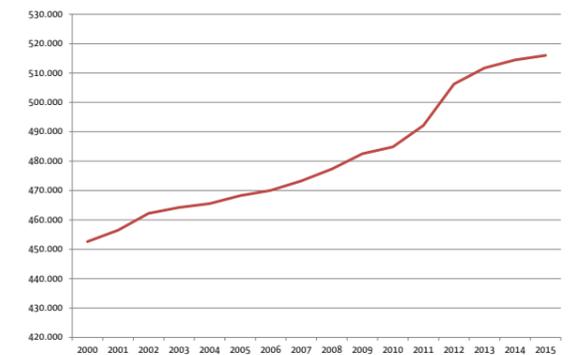
A fast-growing city has to invest in an equally **strong growth of its economy**. The main challenges for the cycle policy in this respect are reinforcing the role of the bicycle in the daily commute, guaranteeing

the accessibility of the city, its shopping streets and entrepreneurs by bike and optimising the role of the bicycle in tourism and as a commercial means of transport for goods and people. There is also a challenge in optimising the bicycle as a 'social' mode of transport that offers younger and older people and people facing financial, social or physical barriers the mobility they need to fully partake in city life.

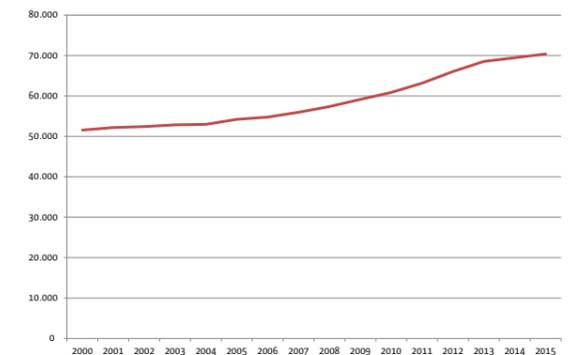
And finally the city is looking for spatially efficient solutions to **increase the capacity of our network**. The bicycle can play a crucial role in the development of a super mobile city where every mode of transport is optimally used. The electric bicycle is an important evolution in this regard because it allows for quick journeys over longer distances. The bicycle is often the fastest and most flexible mode of transport in the city. Moreover, it can be used to switch easily between public

transport and walking, between driving and public transport ... In other words the bicycle optimises the use of the transportation modes and their networks. It enables more options and more combinations for more people. And the potential of the bicycle is even more important in the light of several planned construction works on our network of roads.

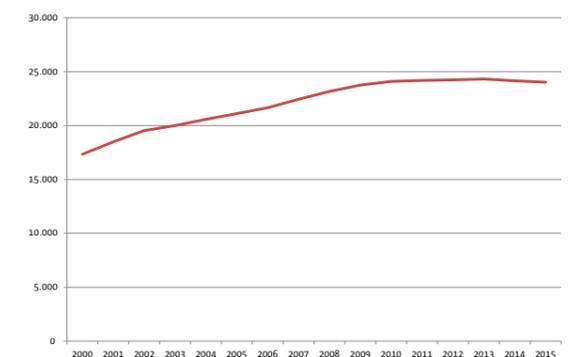
**From 2000 onwards, the city has seen a strong population growth. The share of youngest and oldest residents has increased strongly as well. District and city services, city of Antwerp.**



Evolution total number of residents



Evolution 0-to-9-year-olds



Evolution 80-to-89-year-olds

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Bicycle counter. The growth of the population means more intensively used networks



More cyclists need more bicycle amenities

## An active and accessible cycle city

The mobility plan proposes a vision for an **active and accessible city**. The bicycle policy fully subscribes to this vision and sees the bicycle as the ideal mode of transport in an active and accessible city, taking residents and visitors from activity to activity and bringing people from outside into the bustling city. In line with the mobility policy we want to reinforce the bicycle's role in this active and accessible city by providing strong networks and a new balance on and around these networks.

Crucial for the **optimisation of the bicycle network** is the city's mission to find solutions for more than 100 missing links in the cycle network, at the supra local as well as the local level. This means filling in missing parts, remediating unsafe situations, overcoming barriers... Apart from this we invest strongly in 'super links' by providing high quality bicycle amenities at multimodal hubs in our networks. Finally, the city implements a proactive and an active parking policy to ensure easy and safe bicycle parking solutions.

All these efforts contribute to the potential of the bicycle as the ideal means to aspire to a **new balance** for our mobility networks. Meanwhile, a new balance is also needed for the bicycle network itself. For example, the increasing number of cyclists should not come at the expense of the safety and comfort of our cycling infrastructure. Also, road safety and a roadworks policy at the route level are considered priorities. And finally the city invites everyone to get involved in the further development of a true bicycle culture in Antwerp. Antwerp opts for a socially inclusive policy and wants the bicycle to enable full participation in city life for as much people as possible.



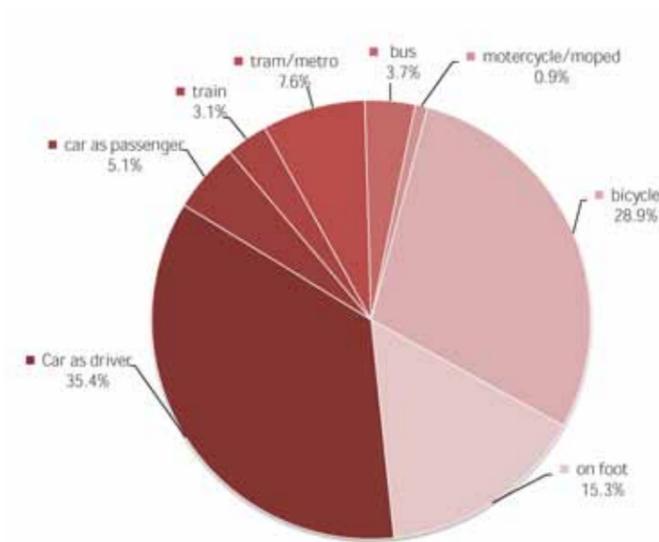
## Antwerp as a world-class cycle city

Antwerp wants to go the extra mile with its bicycle policy. The city wants to flourish as a world-class cycle city. We are not there yet but we are certainly well under way. Antwerp was titled **Flemish Cycle City** in 2012 and shared the honour with Mortsel and Boechout. The jury praised the city's good example as an employer, the bike sharing system, the States-General for Road Safety in Antwerp and the thorough follow-up of the bicycle policy. What is more, the jury has nominated Antwerp again for the title of Cycle City 2015, together with the cities of Ghent and Sint-Niklaas.

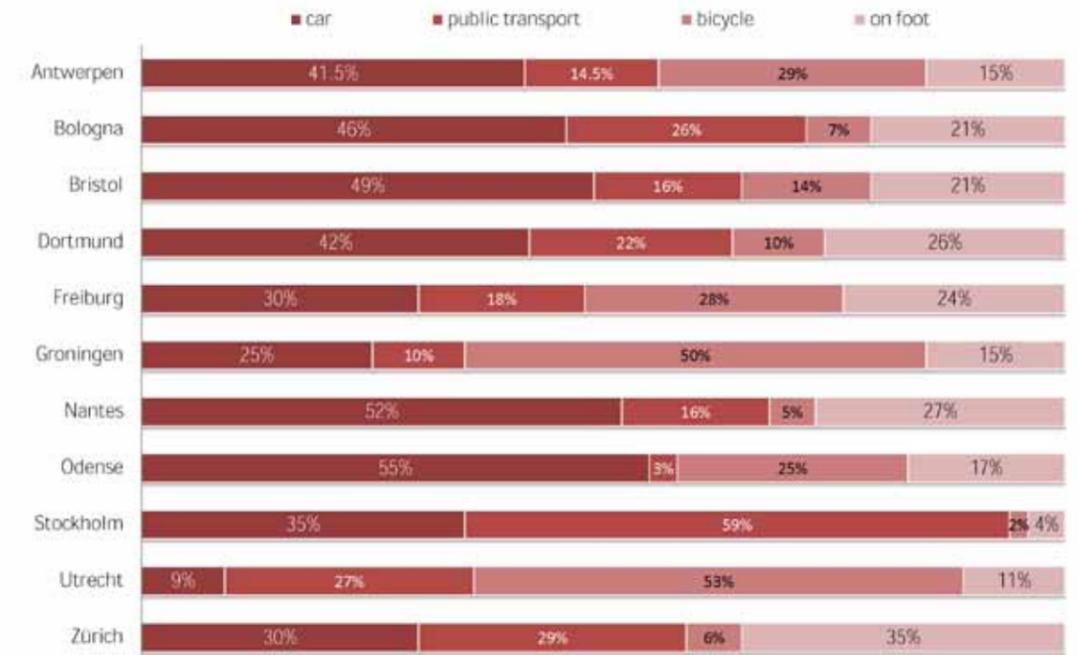
The city's **mobility survey** shows Antwerp's progress as a cycle city as well. In 2010 23,9% of residents

cycled to work. In 2014 this share had risen to 29,5%. The Flemish average for 2013 is 11,2%. The bicycle is even more important for young citizens commuting to school, with an impressive share of 36,5%. The Flemish average is considerably lower again, with a share of 28,6%. Globally, the bicycle is used for 28,9% of all types of journeys in Antwerp. Again this is considerably higher than Flanders' global score of just 12,7%.

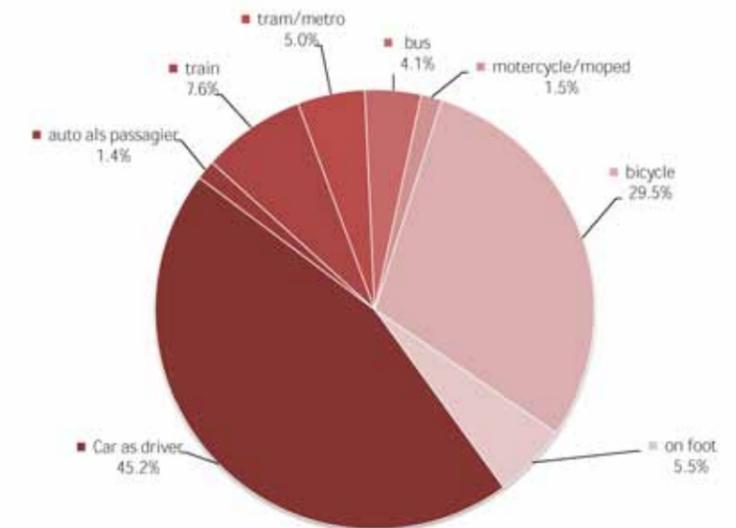
Antwerp is performing better and better, also compared to **European cycle cities**. In a comparative analysis with morphologically similar European cities, Antwerp only has to give way to world cycling cities such as Utrecht and Groningen.



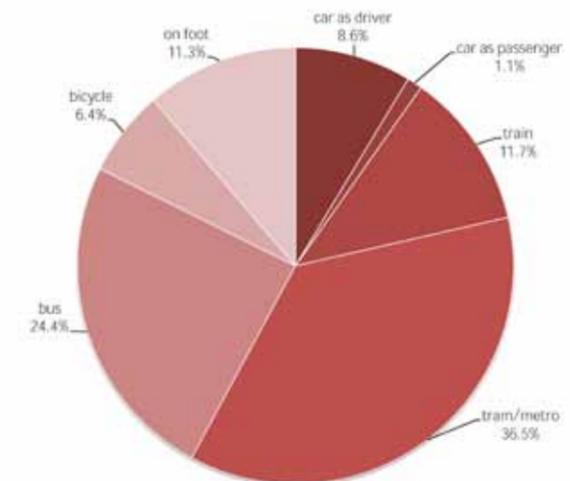
Global modal split residents (Mobility survey 2014)



Modal split compared to European cities



Modal split residents commuting to work (Mobility survey 2014)



Modal split residents commuting to school (Mobility survey 2014)

In 2013 Antwerp conquered a spot on the **Copenhagenize index** as the fifth most bicycle friendly city in the world. Copenhagenize mentions the extensive network of cycle paths and the bike sharing system as our greatest achievements. Other criteria are the presence of a bicycle culture, the cyclists' sense of safety, the consideration of cyclists in urban renewal projects ... The city has earned its place on the Copenhagenize index in the context of a growing worldwide bicycle culture and an increasing awareness of the fact that investing in the bicycle pays off. The fifth place on the Index required only 64 points in 2011 whereas the cities of Nantes and Antwerp needed 72 points for a joint fifth place in 2013.

Antwerp appears on more and more lists of bicycle friendly cities at community, blog and forum pages. The American site [www.bicycling.com](http://www.bicycling.com) lists Antwerp as one of ten **international bicycle-friendly cities** (10



*The city of Antwerp was awarded 5th place on the Copenhagenize Index of bicycle friendly cities 2013*

International Bike-Friendly Cities 2014). The website mentions the information at [www.visitantwerpen.be](http://www.visitantwerpen.be), the amenities at Central Station and the options to borrow or rent a bike.

Antwerp is earning more and more recognition as a cycle city, even while the 'competition' of other cycle cities is growing. The ambitions are greater than ever and the city is taking a great leap forward with this bicycle policy plan. A world-class cycle city needs a **first-class cycle network** allowing cyclists to ride and park their bikes safely, smoothly and comfortably.

With 702 km of cycle paths on a total of 1.649 km of roads it is now time to **perfect our existing networks**. We want to fine-tune our network by solving missing links and by injecting simple but smart parking solutions in the urban tissue. In other areas we are ready to gear up in a big way.

As a mature cycle city and an aspiring world-class cycle city Antwerp seeks strong engagements and partnerships to realise a number of impressive projects. For example, we want to 'cyclify' multimodal hubs at the highest level, e.g. by providing high-quality bicycle parking facilities.

A **bicycle culture** can only fully grow in a safe climate for cyclists and in a context of mutual respect between traffic participants. A strong cycle route on paper can turn out to disappoint in reality due to nuisance and obstacles. And a successful cycling policy involves everyone: residents, entrepreneurs, older people, youth, social target groups ... These are all the ingredients to create a real world-class cycle city, tailored to our residents and visitors.



# A first-class

# cycle network

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*The mobility plan formulates a basic categorisation for our 700 km of cycle paths. The main cycle network at the supra local level has main routes, core routes and switch routes. At the local level the city network has city quarter routes and neighbourhood routes within the fine-grained network of local streets. Where necessary the city and its partners invest in new infrastructure in order to complete these routes. However the coming years the focus lies not on expanding but on optimising and improving the quality and capacity of our cycle networks: solving missing links, creating multimodal super links and elaborating an active and proactive bicycle parking policy.*

## Part 2



## Missing links

By providing solutions for unsafe, missing, weak and illegible parts of our cycle routes, we complete the cycle network and increase safety and quality at the route level. Each type of missing link requires a different approach. Large projects will be necessary but many smaller interventions are especially needed in order to realise a strong network. And there is an extensive array of suitable instruments for this: from simply painting road markings to building bicycle bridges.

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### Types

**Unsafe links** are places with higher risks for accidents and single-bicycle crashes: junctions where different modes of transport meet, derelict infrastructure, awkwardly placed poles, cobblestones, tram tracks ... The city strongly invests in road safety at the level of cycle routes and devises an action plan to tackle obstacles on cycle paths.

**Missing links** are parts of the network where cyclists cannot ride or where the right infrastructure is lacking. Solutions often involve large projects and investments: new connections over longer distances, bicycle bridges to overcome barriers ... A mix of short and long term projects is needed as well as collaborations with various partners.

**Weak links** are parts of cycle routes that inhibit smooth and comfortable cycling. Cyclists want to ride at cruising speed as much as possible. Investing in maintenance is an important part of the answer, but other important solutions are providing level infrastructure, comfort at transitions, a smooth traffic flow at junctions and adequate capacity.

**Illegible links** are parts of the network that lack clarity for the user. The city wants to visualise bicycle routes in the infrastructure itself and thus guarantee logical and legible connections down to the level of the city quarters. However, measures can also be necessary at the neighbourhood level, in the fine-grained network of local streets.



## Instruments

Solving missing links is mostly a question of using the **right instrument at the right place**. The first step is identifying the type of missing link. Often there will be a combination of problems. For instance, a derelict or missing segment will cause an unsafe situation and a poorly lit cycle path will be a weak (uncomfortable) as well as an unsafe link. The context at the location is also a determining factor in choosing the right instrument: the speed limit, the available space, the presence of other modes of transport...

**Cycle paths** are reserved exclusively for cyclists.

Although mostly found alongside roads, cycle paths are not part of the carriageway as such. They are often the best solutions alongside wider roads with higher speed limits. But the densely built up city does not always offer space for separate cycle paths. Sometimes space can be found for a completely separate trajectory away from the public road, for example a **cycle way** through a park. But in the denser parts of the city other solutions will often have to be found.

**Cycle highways** offer high-quality trajectories over longer distances. Cycle highways are fast connections with high levels of safety and comfort, for example alongside railway tracks, busier roads and motorways. The city wants to provide legible connections between these cycle highways and the city cycle network and draw the cycle highways into the urban fabric.

In narrow streets **cycle suggestion strips** in a separate colour offer a highly visible place for cyclists on the road. Much like suggestion strips, **cycle comfort strips** are not exclusively reserved for cyclists, but they are specifically intended to increase comfort for cyclists. One example is a strip of asphalt on a cobbled road. There are several other **steering measures** to guide cyclists towards the safest and most efficient routes, for example by marking out spaces with rivets, painted lines or pictograms.

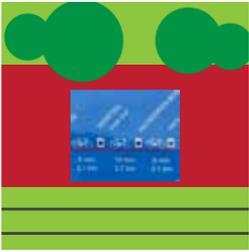
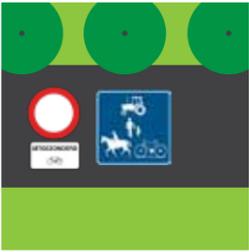


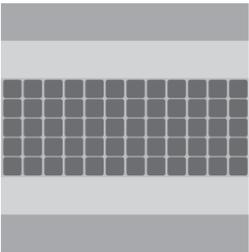
The slower network of mostly 30 km/h residential streets is often perfectly suited for **mixed traffic**. A variant that explicitly prioritises cyclists is the **cycle street**: a quiet residential street where almost the entire width of the street is rolled out as a red carpet for cyclists. Cars are allowed here, but have to stay behind cyclists.

**Cycle bridges and cycle tunnels** are impactful and more expensive measures. Sometimes they are the only option to offer high quality routes in spite of barriers like waterways, railways and the Singel and Ring Road infrastructure. If these larger investments are carefully made in collaboration with our partners, they can provide added value to the entire cycle network (e.g. a high-quality Scheldt crossing for cyclists).

Considering and combining all these different solutions together, we can further optimise the cycle network by **unbundling or doubling** certain trajectories. These instruments are used to create safer or faster alternatives within different cycle routes or to better spread cycle traffic over different routes. Certain trajectories are equipped to process faster and 'through' cycle traffic and others are better suited for slower, local traffic.

### Missing links - instruments

Name	Description	
Bicycle over/underpass	Raised or lowered crossing to overcome a barrier, for example a bridge or tunnel	
Cycle highway	Fast and highly comfortable bicycle connections over longer distances	
Cycle way	Separate, comfortable, hard-surfaced cycle trajectory (in asphalt or concrete)	

Name	Description	
Cycle path	Red asphalted strip reserved for cyclists, separate or alongside a road	
Cycle street	'Red carpet' giving priority to cyclists in residential streets	
Cycle suggestion strip	Non-reserved strip for cyclists in a contrasting colour	
Cycle comfort strip	Cycle suggestion strip in a different material to increase comfort	
Mixed traffic	Bicycle friendly zone without specific measures for cyclists. Safe and comfortable for all traffic participants	
Steering measures	Customised interventions to steer cyclists in the right direction in certain streets, at certain squares and junctions ... such as rivets, pictograms, cycle strips, ...	

## MissinMissing links and the categorisation of roads and streets

Categorisation	Max. speed km/h	Car traffic intensity/ 24h	Main route	Core route	Switch route	City quarter route	Neighbourhood streets
Separate cycle trajectory			cycle highway	cycle way / shortcut			shortcut
Great road City road City quarter road	70		separate cycle path*				
	50		cycle path*				
Main street Neighbourhood street street Residential street	30 or walking pace	> 3500 or intensive public transport or freight	cycle path*				
		< 3500	cycle street	cycle street, cycle suggestion strip, cycle comfort strip, steering measures	cycle street, cycle suggestion strip, cycle comfort strip, steering measures (+ supporting measures)	cycle suggestion strip, cycle comfort strip, steering measures, mixed traffic	cycle comfort strip, mixed traffic

\* If possible

## Categorisation and basic characteristics of the cycle network

Category	Function	Radius	Desired average speed	Priority
<b>Main cycle network</b>				
Main route	Cycle highways or long distance routes across city boundaries. 'Through' cycle routes of the highest quality.	> 10 km	20 km/u	Safety Smooth flow
Core route	Supra local functional routes connecting residential centres, district centres and important activities to each other. The shortest and most logical routes for cyclists.	5 - 10 km	16 km/u	Safety Cohesion
Switch route	Short cycle routes that form the link between local and supra local cycle traffic. Provide continuity and increase the capacity of the network. Comfortable alternative (less traffic lights, quieter...) in light of the increasing bicycle traffic.	< 5 km	16 km/u	Safety Continuity
<b>City cycle network</b>				
City quarter routes	Most important routes at the city or district level. These are the local routes with the highest cycling intensities, providing direct and comfortable connections within the city quarters.	< 3 km	12 km/u	Safety Comfort
Neighbourhood routes	A diffuse network of bicycle friendly streets from which cyclists select their own short, daily routes.	< 2 km	10 km/u	Safety Diffuse

## The supra local and local cycle networks



### Main cycle network

- Main route
- Core route
- Switch route

### City cycle network

- City quarter route
- Neighbourhood route



## Super links

The mobility plan stresses the importance of multimodal hubs where several transport networks intersect at the supra local level (e.g. Park & Rides just outside the city, the high speed train station ...) or at the local level (e.g. other train stations and tram stops ...). At multimodal hubs like these, roads and streets, cycle routes, tram- and bus lines and train connections come together. There are hubs in every network and at every level. The capacity and reach of public transport increase almost exponentially with the bicycle as an intermediate step between bus and tram, car and bus, walking and the station, the train and the work place ...

The right cycle amenities can turn these hubs into real super links within a full-fledged multimodal system. This does not only require large scale amenities such as bicycle parking buildings and extensive bicycle services but also smaller measures such as reserving and adapting space for cycling carpools or improving the integration of existing bike sharing systems.

*Also smaller measures can turn multimodal hubs into real super links.*

## Bicycle switches

Bicycle switches are amenities that facilitate smooth transitions between the bicycle and other modes of transport at multimodal hubs in our network. For example, there are a number of hubs along the Singel and Ring roads which are of strategic importance for the bicycle policy because of their good connections to the road network and access to public transport, combined with their strategic location at cycling distance from the city centre. Here, **Park & Bikes** are developed: bicycle amenities with a pivotal role in the city-wide implementation of bike sharing. And together with the Park & Rides at the edges of the city, they are also of strategic importance for the implementation of the low emission zone.

The city will also be looking for small scale or simple solutions that can be implemented swiftly and that give an important stimulus to hubs in the mobility network. At the entrances and exits of motorways, car-poolers can use **Bike & Carpool** facilities to switch between car and bicycle and continue their journey. A good example of this is the Bike & Carpool facility at the motorway exit in the district of Borgerhout.

But **entrepreneurs and other partners**, too, can help develop smaller or larger super links in our networks. The bicycle parking shelter that Umicore realised together with the province of Antwerp and the Flemish government is a good example. It provides commuting employees coming from the Waasland region with a smooth and congestion-free alternative to reach the factory and the ferry in Kruikeke.

The **bicycle parking building** at Berchem Station is the inspiration for similar projects at comparable locations, such as the Antwerpen-Zuid station. The parking building at Berchem Station optimises the station's function as a hub by combining a number of high-quality bicycle amenities. Not only can cyclists park safely here, the building is also an integral part of a new bicycle bridge over the Singel Road. Cyclists can cross the Singel Road safely, park swiftly and immediately hop on a train, tram or bus.

The city and partners such as the national railway company (NMBS), the Flemish tram and bus company (De Lijn) and event organisers can work together to boost our mobility networks with similar concepts at other stations, at public transport stops, at top locations such as the Sportpaleis arena or at development sites such as Park Spoor Oost.

## Bike sharing

Antwerp is working towards a city-wide bike sharing system. **Increased access to shared bicycles** will make the choice for the bicycle even easier. The current Velo system within the Ring Road and on the left bank can compete with bike sharing systems in other and also larger world cities. 7.349.326 journeys were made between June 2011 and June 2014. In this period the number of Velo journeys almost doubled from 923.977 to 1.805.492. The number of stations increased from 80 to 150, the number of bikes increased from 1.000 to 1.800 and these bikes were ridden for a total of 22.047.978 km.

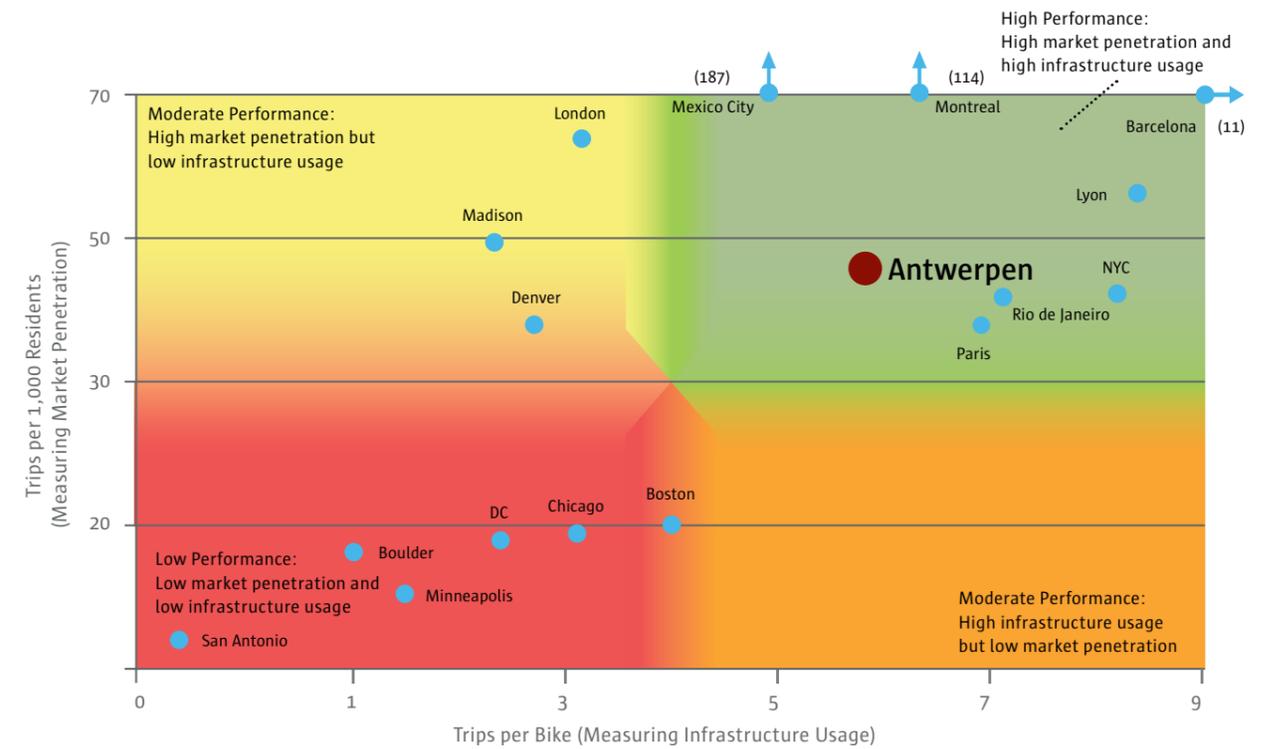
By expanding the bike sharing system mobility options will grow exponentially in the **districts** as well. Shared bikes can provide better connections between the districts and to the inner city as an

extra, quick and accessible means of transport before or after bus, tram or car journeys. Electric bicycles, cargo bikes and other evolutions can further enrich the concept and integrate bike sharing in city life. The city is open to these evolutions and wants to support new initiatives with added value.

The city is researching strategies and **forms of cooperation** with the private sector and with operators of other bike sharing systems such as Blue-bike and Fietshaven. Ultimately the city wants to arrive at a wide and diverse array of complementary initiatives for the whole city. The current Velo bike sharing system allows for mostly short journeys within the area covered by Velo stations. Other systems allow for further and more journeys inside and outside of the city in the course of a day (Blue-bike) or even a year (Fietshaven).

## Bike-Share System Performance: Trips per bike vs trips per 1,000 residents

Antwerp performs well on the performance matrix of the ITDP Bike Sharing Guide ([www.itdp.org](http://www.itdp.org)) with 6 journeys per bike per day (doubling the initial expectations) and with an efficient use of the infrastructure by a sufficient number of users



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# Active and proactive cycle parking

The city implements a two-track bicycle parking policy with a proactive and an active strategy. The proactive strategy ensures a continuous and sustainable increase of cycle parking space in the medium and long term. The active approach formulates and realises high-quality solutions for real and acute needs at specific locations.

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## Proactive policy

The proactive policy ensures that cycle amenities can **piggyback on other projects** and thus seizes as much opportunities as possible to sustainably expand the offer of cycle parking facilities. The two most important instruments in achieving this are the building code and the various plans for the renewal of public space.

The **building code** is a crucial instrument in the cycle parking policy because it allows the city to increase the number of indoor cycle parking spaces in the middle and long term. Parking indoor is the safest and most efficient option in terms of saving (public) space. Residents, developers and entrepreneurs with building or renovation plans of certain dimensions will have to comply with the building code and integrate space to park bicycles within their buildings. The norms in the building code vary depending on the number of residents, users and visitors of the building.

The second instrument for a good proactive cycle parking policy is the integration of cycle amenities in **spatial plans**. Plans for the renewal of public space are especially important. The city wants to map out the cycle parking needs and design customised solutions for each spatial project. This way the city can integrate the best high-quality solutions in new designs for public space.

## Active policy

The city has elaborated a **basic scenario** to select the right cycle parking amenities for concrete needs at specific locations. Based on this scenario the city develops customised solutions, taking into account local factors such as the average duration of cycle parking in the area, walking distance between the parking facility and the destination, the type of destination often visited in the area ... The more safety and comfort a cycle parking facility offers, the further the cyclist is prepared to walk. And the longer the cyclist plans to leave his bicycle behind, the safer the facility has to be.

At small scale destinations for short visits such as a butcher's shop, a grocery store or a bakery, **bicycle racks** will suffice, or even enough space to neatly park the bike using the kickstand. Larger shopping streets, hotels, bars and restaurants and event locations often do need bicycle racks. Where necessary, **mobile bicycle racks** can increase bicycle parking capacity at large events. **Bicycle shelters** provide added value especially at places where bicycles are left behind slightly longer, such as stations, schools, businesses and offices.

When the building code doesn't apply and individual indoor parking space is lacking, **neighbourhood cycle parking facilities** are a good alternative. The city's parking broker looks for opportunities, for example company parking facilities after office hours or unused private garages from residents. But professionally managed parking garages, too, can have 'lost' spaces where bicycles might be parked. The parking broker balances demand and supply. Agreements between professional parking garages and hotels, restaurants and bars are encouraged.



Testproject bike parking boxes



The city wants to anchor high-quality cycle parking solutions in new building projects through the building code

## Basic bicycle parking scenario

Type	none, marked space, bike rack	bike rack with/ without shelter	mobile bike rack	bicycle shelter, bike box, indoor and secured	Bike box, neighbourhood facility / indoor
Time	short <15 min	medium 15 min – 4h	temporary 4 – 8h	long (day) 4 – 8h	long (day + night) more than 8h
Maximal walking distance	10 - 20m	30 – 40m	100m	100 – 200m	300m
Function	bakery, post office ...	shopping street, sport centre ...	event	transfer point, company building, station, school ...	home

When neighbourhood parking facilities are also not an option and if the dimensions of public space allow it, **bike parking boxes** may offer a solution for residents who are looking for a sheltered and safe parking space for their bicycle. The city has already initiated trial projects in a number of districts.

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Offering infrastructure to **store bicycles** can greatly alleviate the pressure on public space because this facilitates the safe storage of many bicycles for longer periods. The city has already offered this service to students leaving their digs and bikes behind during the summer months.

Whenever it provides added value for the city and cyclists, the city wants to explore ways to stimulate or support the organisation of **extra cycle parking services** by private and public partners, such as supervision, repair services, tourist information, bicycle accessories ... High quality (paid) facilities for cyclists might thrive at certain locations, depending on the ambitions of the partners and the quality of the services offered. Indoor parking facilities are often suited to offer integrated solutions for charging e-bikes or parking non-standard bicycles like cargo bikes or recumbent bicycles.

Finally, **enforcement** is a necessary part of the active policy as well. Obstructively parked and abandoned bicycles and bicycle wrecks are removed from public space as quickly as possible. Removed bicycles can be found by the owner via the website [www.gevondenfietsen.be](http://www.gevondenfietsen.be).

*Neighbourhood bicycle parking facilities often offer solutions for different types of bikes*



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# First class

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## cycling

*First class infrastructure is an absolute precondition to become a world class cycling city. But infrastructure on its own is never a guarantee for a journey in first class. This requires a framework of services and support. In order to put Antwerp on the map as a world-class cycling city we need a strong set of supporting measures. We want to offer a safe 'cycling climate' – socially as well as in terms of traffic. We want to maximally avoid temporary obstacles such as roadworks, construction sites, wear and precipitation. We are working on a city-wide cycling culture. This means trying to make everyone feel involved in their own way and inspiring and enabling as much people as possible to choose the bicycle for as many journeys as possible.*



## Safety as a priority

The city subscribes to the Go for Zero vision and thus strives towards zero traffic victims together with its partners. Antwerp is the only Flemish city to have its own **States-General for Road Safety in Antwerp** (SGVA). The SGVA coordinates and harmonises all road safety measures on four fronts of action: education, engineering, enforcement and engagement. The fourth congress of the States-General for Road Safety in Antwerp took place in the fall of 2014 and the results included concrete proposals for a safer cycling environment. These actions are being studied and integrated in the bicycle action plans wherever possible.

A real cycling culture can only flourish in a **safe cycling climate**. Cycling has to be safe and comfortable before we can expect a resolute choice for the bicycle. We are asking for mutual respect and courteousness from every traffic participant and also among cyclists themselves. We want to increase the feeling of safety by investing in the safety of our cycle network, enforcing speed limits and promoting the efficiency, practicality, fun and safety of the bicycle through positive campaigns.

### At route level

Fully in line with the city's approach to missing links, we are investing in road safety at the route level. Indeed, **one unsafe link** can and often will impact the use, experience and travel time of the entire route. The coming years the city will evaluate road safety in terms of road segments, trajectories and routes rather than individual junctions. Children are an absolute priority in this approach. The city works together with all partners, schools, residents and organisations to increase the safety of young cyclists, for instance by issuing 'cyclist's licenses', providing blind spot training and cycling classes, organising courses for school teachers and lending out educational material.

Recently a number of districts elaborated spatial **'play fabric plans'**, for instance for the Old Berchem quarter, the Green Corner quarter, the North Antwerp quarter, the Kiel quarter and for the entire district of Wilrijk. The goal is to 'interweave' isolated play areas into one coherent fabric of spaces that can be reached safely by children. The States-General for Road Safety in Antwerp supports this process with expertise and information and in turn acquires valuable information about routes between school, home and play areas. This information is combined with the traffic accidents map of the police and compared to information about perceived safety. The complete picture facilitates the identification of problems and the selection of concrete priorities.

**The maintenance** of the cycle networks is very important for the city. This entails a thorough monitoring of damage and wear. Anyone can report damage to the street, pavement or cycle tracks, obstructive poles, unclear road marks ... via the website. The States-General for Road Safety systematically screens maintenance projects in the districts for opportunities to improve road safety. Sometimes the suggested measures are very small, for example removing or moving a sign or pole, or adapting road marks. Sometimes measures are more substantial such as pavement extensions or other traffic calming measures.

**Leaves, snow and frost** are obstructive and dangerous obstacles on cycling routes as well. In addition to the measures to prevent single-bicycle accidents, the city keeps the cycle paths free of snow, frost and leaves as much as possible. The city elaborates plans prioritising the most important routes and segments.



## Bicycle climate

It is crucial to guarantee **social safety and social control** as much as possible. If these elements are lacking, cyclists will avoid cycling in certain areas or neighbourhoods. This is often linked to certain times of the day. Examples are the Ring and Singel zones at night, shopping street 'de Meir' after closing time, large scale bicycle parking facilities (e.g. Central Station), bicycle tunnels ... Several measures are implemented to help solve this problem, such as (extra) lighting, avoiding blind spots when designing public space, cameras ...

Removing **obstructively parked and abandoned bicycles** ('orphaned bicycles') does not only increase the capacity of bicycle parking infrastructure, it also improves perceived safety. Obstructively parked

bikes can force other road users in unsafe situations and bicycle wrecks have a deterring effect. Apart from extra surveillance at places where bicycle theft happens more often, the city also provides a user friendly bicycle labelling system and information about bike theft prevention. Online information and services are promoted; examples are the digital bicycle label application via [www.antwerpen.be](http://www.antwerpen.be), online theft reporting via [www.police-on-web.be](http://www.police-on-web.be) and retrieving stolen and lost bikes via [www.gevondenfietsen.be](http://www.gevondenfietsen.be).

The bicycle culture and climate in Antwerp are created mostly by the road users themselves. This is why the city asks respect for the rules and **mutual respect** between cyclists and other road users. For instance, fast cyclists (racing bikes, electric bicycles, sportive cyclists ...) should mind slower

cyclists (elderly, children ...), cyclists should stop at red lights, give priority when required, signal manoeuvres in advance and use the bell when overtaking other cyclists. Motorists for example have to keep a safe distance when overtaking cyclists, be careful for oncoming cyclists in one-way streets, give priority when leaving parking spaces and should not park on cycle paths. Pedestrians have to pay attention when crossing cycle paths and, likewise, cyclists have to mind pedestrians.



## Accessible Antwerp

The construction works in execution of the Flemish Masterplan 2020 will have a considerable impact on traffic in and around the city of Antwerp. The city and its partners elaborate measures to guarantee the accessibility of Antwerp. Antwerp sees the roadworks as an opportunity to promote the bicycle as the ideal urban means of transport: quick, flexible, healthy for cyclists and good for the environment, easier to park than a car ... Indeed, these assets are even more important during roadworks. The focus lies mainly on providing safe and comfortable alternative routes, high-quality signage and up to date online and offline information. Infrastructure and information are two equally important pillars of this positive roadworks policy.

### Without detours

The city, the Flemish government and their partners have thought out **fourteen radial cycle routes**. These routes all go from the 'leien' (the 19th century city belt) to the neighbouring municipalities and to a number of larger centres along the cycle highways. In addition, there are **three tangential routes**: one comprises the leien, one forms a loop from the Scheldt Quays to the Ring Road cycle path (20th century belt) and one is the so-called district route. Both **River banks remain connected** at all times. The city consults with the province of Antwerp to further improve the legibility of the routes.

In case of **private construction works** preference should go to the **shortest and safest route through the construction site**. Measures to reduce the impact of such construction works require extra care for safety.

Finally the city supports the realisation of the **quick wins** formulated by the Flemish government in the implementation of its policy regarding Masterplan 2020. Three of these quick wins specifically target cyclists.

### Well-informed

The city opts for a **signage system** for the alternative routes based on a number of principles. The number of signs is limited in favour of clarity. Destinations are combined on one signboard and grouped according to their directions. The system includes functional as well as recreational destinations and mentions traveling distances. Signs are placed strategically before junctions so that cyclists can concentrate on traffic and manoeuvres at the junctions themselves.

The city is developing a new **cycle map**. This map indicates the radial and tangential routes and gives information about the signage system itself as well as relevant routes and projects from Masterplan 2020. Velo stations, Blue-bike stations and Fietshaven and Fietspunt repair stations are indicated. Distances are shown as well. This has a strong sensitising effect because people often overestimate cycling distances. After all, the distances travelled by car to the same destinations often are a lot greater. The new cycle map will be available on paper as well as online.



## Accessible Antwerp: infrastructural measures

### Radiale routes

1. Berendrecht-Antwerpen
2. Antwerpen-Ekeren-Hoevenen
3. cycle highway Essen-Antwerpen
4. Brasschaat-Antwerpen
5. cycle highway Herentals-Antwerpen
6. Wijnegem-Antwerpen
7. Oelegem-Antwerpen
8. Borsbeek-Antwerpen
9. cycle highway Mechelen-Antwerpen
10. Boechout-Mortsel-Antwerpen
11. Kontich-Edegem-Berchem
12. Aartselaar-Wilrijk-Antwerpen
13. Hemiksem-Hoboken-Kiel-Antwerpen
14. Kruikebe-Burcht-Antwerpen
15. Zwijndrecht-Antwerpen

### Tangential routes

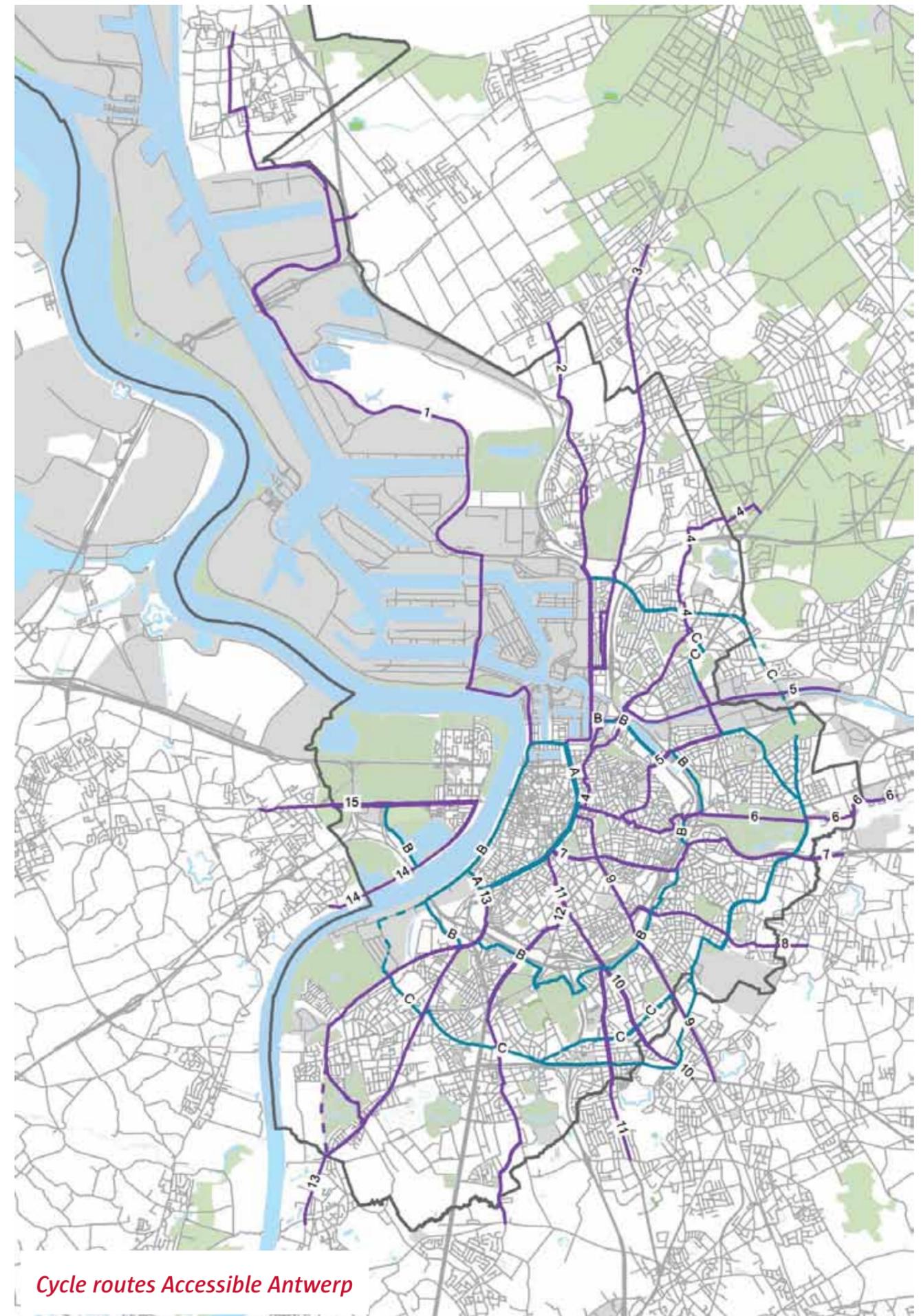
- A. Leien
- B. Ring Road cycle path
- C. District route

### Scheldt crossings

- Sint-Anneke pedestrian tunnel
- J.F. Kennedyfietstunnel
- ferry Kruikebe-Hoboken

### Quick Wins

- Quick Win 12 – Bicycle bridge Rugeveldlaan: using the excess width of the existing E34 motorway bridge over Rugeveldlaan as a bicycle bridge on the route from Wommelgem/Oelegem to Antwerp.
- Quick Win 29 – Shortening the Ring road cycle path: by providing a cycle path underneath the entrance and exit of the E34 motorway, the Ring Road cycle path can be shortened considerably at the Antwerp-East motorway junction
- Quick Win 33 – Improved connection to the Antwerp-Essen cycle highway: the cycle highway segment from Antwerp-Noorderdokken to Groenendaallaan can be realised in the short term. The connection to IJzerlaan cycle bridge has to be made in the slightly longer term.



Cycle routes Accessible Antwerp

The city is also working on a new **online platform**. As of spring 2015, residents and visitors will find the latest mobility information at [www.slimnaarantwerpen.be](http://www.slimnaarantwerpen.be). In the long term cyclists will find a route planner here, allowing them to select routes according to their own personal criteria, for instance a preference for cycle highways, a green route, the shortest route ...

Another information and communication initiative is **Wijs op weg** ('Wisely on your way'). The city wants to offer customised travel advice to businesses, schools and tourist attractions. Companies and institutions are selected based on size, location and accessibility to create a customised communication trajectory together. This includes working out a mobility guide with information about different means of transport, reachability, the cycling allowance and other incentives and facilities such as showers and lockers.

Undeniably, there is a growing bicycle culture in Antwerp. This is expressed in the increasing number of cyclists, the prominent presence of bicycle infrastructure in the streets, the growing amount of bicycle shops and bicycle blogs, the expanding range of bicycles... A true bicycle culture is also marked by a blurring line between functional and recreational cycling. Therefore the city has attention for bicycle tourism and recreational and sportive cycling. Also, the city wants to make sure that everyone is able to benefit from the advantages of the bicycle. The city's bicycle policy is inclusive, seeks interaction with (potential) cyclists and supports target groups that would benefit greatly from cycling, but are experiencing difficulties using or acquiring a bicycle.



# City-wide bicycle culture

## For every motive

### Sport, recreation and mobility

The bicycle links sport, recreation and mobility in a unique and spontaneous way. The bicycle is used for **sportive and recreational** motives (e.g. sportive bicycle tourism, bicycle tours) and **functional journeys** (e.g. home-work-school journeys). The same overlap goes for cycle infrastructure. Examples are cycle routes in the port area, which are used by employees as well as tourists, or cycle highways used by commuters and visiting shoppers.

Sport, recreation and mobility can profit from **mixed bicycle projects**. Larger sportive bicycle happenings definitely offer win-win situations. For example, Antwerp is the starting point of stage three of the Tour de France in 2015. A possible campaign in the run-up to the Tour the France could be: 'Come prepared to the starting point of the Tour in Antwerp: cycle to work and get fit.' Sportive, recreational and functional cycling can also be integrated in mobility campaigns such as 'Antwerpen Autovrij' (car free day in Antwerp), 'Fietsdag voor werknemers' (bicycle day for employees) and the Brompton bicycle race, which promotes the folding bike in a sportive context.

And finally there is a lot of promise in encouraging **bicycle tourism**. This means stimulating the 'traditional' tourists visiting the city as well as the residents of Antwerp themselves. The city wants to encourage residents to explore their own city by bike.

### Cycling and the economy

The bicycle has an important role in the economy of the city. More specifically it provides access to the many urban **functions and amenities**, which in cities are often located at cycling distance from each other and from residential areas. These

functions and amenities are also our businesses and entrepreneurs. Cycling thus provides access to **employment** as well (see also the Bicycle School for adults). Through 'Wisely on your way' the city also advises entrepreneurs in making their companies optimally accessible for their (potential) employees.

The bicycle is not only the ideal means to go to work, shop or visit bars and restaurants in the city: in a city with a true cycling culture, the **bicycle is a business**. The city wants to offer support and workable frameworks to creative entrepreneurs. Examples are cargo bikes (e.g. Bubble Post) and bicycle couriers, the recent start-up of the first bicycle taxi in Antwerp and entrepreneurs and societies organising bicycle tours for tourists.

As an enterprise and an employer the city sets a good example with ample bicycle amenities and a bicycle allowance for its employees, with bicycle couriers, regular and electric company bicycles and with bicycles for its green maintenance workers.

## For everyone

In an urban environment the bicycle brings everything within reach that is needed to live well: education, employment, trade, hospitality businesses, culture, sport and recreation. The bicycle is accessible to many people because cycling is often taught at a young age. But for those who have never been taught, cycling is not at all self-evident: balancing, steering, braking, minding other road users or obstacles ... The cost of a bicycle can be a barrier for people as well, or the amount of physical effort required. The city wants to eliminate as much of these barriers as possible, on the one hand by investing in bicycle education and on the other hand by helping residents to acquire or access bicycles.

### Access to bicycles

The city makes bicycles available to a broad spectrum of users through its **bike sharing system** – albeit on a relatively small surface today. A study has revealed that the current Velo system in the area within the Ring Road and at Linkeroever (the 'left bank' quarter) has a very wide and varied group of users. These users are mostly from Antwerp (78 %), of all ages and from different educational backgrounds. The bikes are used for a mix of journeys: work, going out, shopping and visiting friends and family. By providing more bicycles at more locations throughout the city and by exploring the potential of electric shared bikes, the city wants to increase the reach of shared bikes in the city even further.

Different (potential) cyclists have specific needs that cannot all be solved by shared bikes. But special bicycles are often more expensive to buy. The city wants to offer support by organising **collective purchases**. For instance, some commuters might prefer an individual, compact folding bike for their daily combinations between train, tram, bus or car. And owning an electric bicycle can mean an enormous expansion of possibilities in the daily lives of certain target groups. As an alternative to the car, train, bus or regular bike ... or even as an alternative to having to stay home.

Also, some types of bicycles take a big chunk out of the family budget, while they are only needed for short periods, e.g. during specific phases in childhood or family life. Examples of this are



children's bicycles, which have to be adapted to the age of the child, and cargo bikes. In this context the city is considering the organisation of **second hand bicycle markets** for good-quality used bicycles.

#### *Bicycle education*

The availability of a bicycle is not the only requirement: knowing how to cycle, knowing the rules and gaining experience in traffic are just as important. **Bicycle education at a young age** can anchor cycling as a natural choice for life. From a young age the focus should be on safe and courteous behaviour in traffic. For instance, in addition to educational games and materials the city offers steering agility lessons for students who cannot cycle or lack cycling skills and organises courses in traffic and mobility education for school teachers. Preventing blind spot accidents is an important bicycle education theme.

But bicycle education is not just for children. Adults sometimes need to learn how to cycle as well, or they might need to freshen up their skills. The city wants to enable all residents to cycle and offers a modular programme of bicycle lessons for adults in its own **Bicycle School**: from teaching adults how to ride a bicycle, to teaching them to cycle safely in the city. The city wants to teach 600 people to cycle per year and specifically aims at unemployed residents or residents employed in the social economy. The city is also looking into the possibility of a programme for senior citizens to freshen up their knowledge of the traffic rules, maintain their cycling skills and to introduce seniors to new developments such as the electric bicycle.



# Colophon

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