



# ANTWERP Belgium



Note: This document is a working paper

# **Table of contents**

1.	Introduction to Antwerp	1
	1.1 History	
	1.2 Layout of the city	2
	1.3 Infrastructure and connectivity	3
	1.4 Accommodation	3
	1.5 Tourism attractions	4
2.	Destination growth strategy	5
	2.1 Destination management	6
3.	Visitor behaviour and satisfaction	12
4.	Economic impact	15
	4.1 Tourism flows	15
	4.2 Economic impact	21
5.	Social and cultural perspective	22
	5.1 Attractions	22
	5.2 Events	25
	5.3 Community attitudes to tourism	26
6.	Environmental perspective	27
	6.1 Sustainable tourism policies and strategies	27
	6.2 Greenhouse gas reduction and energy efficiency	27
	6.3 Mobility	
7.	Technology and new business models	30
	7.1 The sharing economy	30
	7.2 The smart city	31
	7.3 Open data	32
8.	Concluding remarks	33
An	nex A: Antwerp city centre map	35
	nex B: Organogram	
	nnex C: Other indicators	
	st of figures	
	st of tables	
	bliography	
	orvious	

# 1. Introduction to Antwerp

Antwerp is the second largest city in Belgium and capital of the Belgian province of the same name, with a population of over 500,000, and measures 203.4 square kilometres in total area. It is also the second largest port in Europe (in volume of goods) and ranks among the 20 largest ports in the world. The city has a direct link through open water with the North Sea.

Since the 16<sup>th</sup> century Antwerp has been the commercial heart of Flanders, the Flemish/Dutch-speaking region of Belgium.

# 1.1 History

Excavations have shown that Antwerp was inhabited as long ago as the Gallo-Roman period (2<sup>nd</sup> or 3<sup>rd</sup> centuries A.D.). The city first experienced an economic boom in the 12<sup>th</sup> century, when the rival port of Bruges started silting up. By the first half of the 14<sup>th</sup> century, Antwerp had become the most important trading and financial centre in Western Europe, based largely on its seaport and wool market.

In 1356 the city, which had been part of the Holy Roman Empire, was annexed to the County of Flanders and lost many of its privileges, partly to Bruges' advantage. Fifty years later, the political and economic tide turned again and, as the Belgian Golden Age unfolded, Antwerp became a world-class metropolis, described as "the loveliest city in the world".

By the second half of the 16<sup>th</sup> century, the city was the focus of politico-religious struggles between the Protestant North and Catholic South (then ruled by Spain), which led to the River Scheldt being closed. From an economic point of view, this was a disaster. Yet the city continued to flourish culturally until the mid-17<sup>th</sup> century thanks to painters like Rubens, Anthony Van Dyck, Jordaens and Teniers, printers such as Plantin and Moretus, and the famous Antwerp harpsichord builders.

From 1650 until the 19<sup>th</sup> century, Antwerp went into serious decline, as the Scheldt remained closed and the city became little more than a provincial town. It was only after the fall of Napoleon at Waterloo (1815) that Antwerp entered a short period of prosperity, which ended with the Belgian Revolution (1830) and once again the closure of the Scheldt. The river was finally and permanently reopened in 1863, paving the way for Antwerp to return to its former glory.

Apart from interruptions during the two World Wars, Antwerp has experienced steady economic growth since the start of the 20<sup>th</sup> century and is now home to the second largest port in Europe, facilitating the city's petrochemical industry. But it is also a

major trade and cultural centre, home to 170 nationalities, known as the "diamond capital" of the world and, especially, the world hub for uncut diamonds.

# 1.2 Layout of the city

Until 1859 Antwerp was surrounded by its 16<sup>th</sup> century fortified walls, which were transformed in the latter half of the 19<sup>th</sup> century into broad avenues as a new, larger half-circle of fortifications was built. This encircling belt was replaced after 1945 by another system of ring roads, which connect with a network of national and international highways. Several tunnels connect the right bank of the city with the left bank, where considerable residential and industrial development has taken place since World War II. The city centre on the river's right bank includes the old city, which has narrow, winding streets and old buildings (see Annex 1).

Vlaanderen

België

Europa

Figure 1.1 Location of Flanders

Source: www.guidodevliegher.be/fiets\_vlaanderen.htm

The 19<sup>th</sup> century city, with broader and substantially parallel streets, stretches beyond the old city and merges with some of the suburban extensions annexed in 1983. Another right-bank area spreads beyond the 19<sup>th</sup> century fortifications and is characterized by numerous modern buildings.

The largest part of Antwerp, however, is the essentially non-residential northern seaport complex. Most of the agricultural waterside villages incorporated by the city have been eliminated to make room for expansion of the somewhat bleak areas of docks, industrial sites and railway yards. Locks connect this right-bank complex with the tidal Schelde River.

In 1983 the city was merged with the surrounding towns and is now one municipality ('Stad Antwerpen'), with the former city of Antwerp now the District Antwerp. This study is dedicated to the District Antwerp.

# 1.3 Infrastructure and connectivity

Antwerp is well connected with a close-knit road network. Several regional motorways provide good circulation, while the city also lies at the crossroads of five major international motorways, giving access from all directions – including the main European north-south and east-west links. It is also on the international high-speed rail network, with direct connections to Amsterdam (including the airport), Lille (for connections to the United Kingdom) and Paris (including Charles-de-Gaulle International Airport).

Brussels' airport is the international airport for Belgium, while Amsterdam is a European hub with more global connections. Antwerp has a regional airport that mainly handles outbound holiday flights, a daily regular service to London City Airport and private business aircraft. The national rail network provides the city with a frequent service to Brussels and links with all national cities. Regionally and locally there is a well-organized public transport network with frequent buses and trams. Daily rover cards and the city card provide easy access for visitors.

Table 1.1 Travelling times between Antwerp and selected points

Airport	Travelling times to the city		
	Public transport	Road	Kilometres
Antwerp/Deurne	30 minutes	15 minutes	7
Brussels Airport	35 minutes	50 minutes	45
Amsterdam Airport	65 minutes	2 hours	160

#### 1.4 Accommodation

Antwerp's total accommodation capacity is 5,213 rooms, providing 12,851 beds. The 59 classified hotels comprise 28% one- and two-star properties, 42% three-star, 30% four-star and zero five-star hotels, together accounting for 9717 beds. The capacity in B&B's is unclear as not all are registered.<sup>1</sup>

**Table 1.2 Tourism enterprises** 

Type of enterprise	Number	Year of analysis
Caravan parks & camping sites	4	2015 <sup>a</sup>
Guest houses (e.g. B&B)	84	2015 <sup>a</sup>
Youth hostels	8	2015 <sup>a</sup>
Hotels	59	2016 <sup>a</sup>
Holiday parks	0	2015 <sup>a</sup>
Self-catering units	72	2015 <sup>a</sup>
Miscellaneous lodging	25	2015 <sup>a</sup>
Conference centres	1	2016 <sup>b</sup>
Attractions	71	2016 <sup>b</sup>
Restaurants	806	2015 <sup>b</sup>

Sources: <sup>a</sup> Toerismevlaanderen (2017), *Te gast in Vlaanderen 2011-2015, Logiesaanbod in Vlaanderen* <sup>b</sup> Bosman, T., manager destination development Stad Antwerpen, conversation with the author (27-07-2017)

#### 1.5 Tourism attractions

#### Architecture and old town

The Cathedral of Our Lady ('Onze Lieve Vrouwkathedraal') is Belgium's largest Gothic church. It is a landmark for the city. The market square, the town hall and the guildhouses form a remarkable 16<sup>th</sup>–17<sup>th</sup> century setting, attracting many visitors. This, together with the numerous restaurants, shops and cafés, guarantee a pleasant, authentic atmosphere.

#### Museums and art

The Plantin Moretus Museum, named after the famous 16<sup>th</sup> century printer family and the first industrial printer in history, and the Royal Museum of Fine Arts (currently closed for restoration until the end of 2018). Paintings from Flemish primitives to 19<sup>th</sup> century artists make the collection a valuable insight into fine art over the centuries. Museums of Modern Art and the 'Museum aan de Stroom' ('MAS') are other cultural attractions which complete the "must-sees". The Rubens House, where the famous painter once worked and lived, is now a well-developed attraction.

#### **Atmosphere**

The authenticity and charming architecture of the city are directly complemented by the atmosphere of the city and city life. The traditional Flemish lifestyle is well preserved in the city. And as many other Flemish cities have similar architectures and museums worth visiting, it is more likely to be Antwerp's genuine Flemish lifestyle that makes it such great attraction for foreign visitors.

Figure 1.2 Town hall and guildhouses



Image: author.

# 2. Destination growth strategy

Table 2.1 Performance criteria for destination growth strategy

Criteria	Yes (√) / No (x)
Existence of a DMO for the destination	✓
Clear vision and governance structure for destination in place	✓
Sustainable tourism policy and regulations within the overall development strategy of the city	✓
Differentiation of the destination	✓
Public and private sectors' commitment/involvement	✓
Collaboration with the stakeholders within and across sectors	✓
Regular update of the strategy & action plan	✓
Performance measurement tools in place	✓

Table 2.2 Performance criteria for visitor satisfaction

Criteria	Yes (√) / No (x)
Intentions: repeat visitation (within 5 years)/recommendation	✓
Analysis of visitor satisfaction with different elements of destination	✓
Analysis of visitor satisfaction with their overall experience at the destination	✓

# 2.1 Destination management

#### 2.1.1 Organizational structure

Visit Antwerpen is the city's destination management organization (DMO) that sits within the local government's Department for Business Development and City Marketing ('Ondernemen en Stadsmarketing'). This department is tasked with promoting Antwerp as an attractive city to live, study, work and visit. In effect, it is the city's marketing and promotions agency, communicating and cooperating with other departments as necessary.

Visit Antwerpen is responsible for marketing the city as a destination for visitors, both leisure and meetings, conferences, etc. (MICE), as well as providing information and other and other facilitation services and distributing the Antwerp Tourist City Card<sup>1</sup>. (Annex B: Organogram). Visit Antwerpen's current budget (2017) is EUR 1.76 million, excluding staff and housing costs.

In addition to Visit Antwerpen's role in marketing, the city is active in urban and societal management, including monitoring visitors flows, monitoring and managing the liveability of shopping and nightlife areas, supporting entrepreneurs in data collection and distribution, education and training of entrepreneurs. The city seeks to capitalize on, and improve, the assets of the hospitality industry by developing a clear and supportive hospitality policy.

Antwerp has the second highest density of hotels and catering businesses of any city in Flanders, after Bruges. As such, the quality of this industry is key for the city from an economic, social and tourist point of view. Hospitality businesses are essential to the city's social fabric, too. Residents and visitors meet in Antwerp's hotels, cafés and restaurants. This makes for lively city streets, which in turn enhances the feeling of safety among residents and visitors. Equally, the combination of hospitality amenities with other leisure opportunities, like shopping or cultural visits, is considered to be a big asset for the city. In the city centre most shops are open seven days a week.

#### 2.1.2 Ensuring quality

As already indicated, the city's department for Business Development and City Marketing monitors the development of the city in several ways. One example is the development of a retail area monitoring system, where the mix of supply in shops is monitored. There is also a quality check on the type of shops in order to maintain the image of the area. These checks are carried out every three years. The same

This card is a self-financing, not-for-profit project of Visit Antwerpen and provides the buyer with easy access to free or reduced-cost entrance to attractions, as well as unlimited public transport.

checks are made in the most visited bar and restaurant areas. This information also helps to provide indications as to which types of attraction and enterprise are lacking.

In April 2017 the Flemish regional government introduced quality regulations for all paid accommodation, including B&Bs, controlling safety (fire regulations), health, cleanliness, amenities and insurance. This means that individuals offering rooms for rent (as well as hotels etc.) now have to adhere to quality and safety regulations.

# Strategic 'hospitality' centres

The District of Antwerp has identified 12 strategic 'hospitality' centres. A strategic hospitality centre is an area with a high density of hotel, catering and entertainment businesses, and where there is a certain coherence in terms of target audience, activities, etc.

Afbakening Horecakernen Centraal Station Eilandje Historisch Centrum Schipperskwartier Studentenbuurt Theaterbuurt 6 Zuid 8 Zurenborg 9 Sint-Anneke 10 Lange Lobroek 11 Sint-Jansplein en omgeving Sportpaleis

Figure 2.1 Strategic hospitality centres

Source: Hofstraeten van, D., Meting van de Antwerpse horecakernen 2013, Stad Antwerpen, Antwerpen.

There are also hospitality centres outside Antwerp's inner ring road. These are invariably micro-centres with a small number of businesses, mainly catering to the local population and incorporated in local shopping streets.

#### **Survey of Antwerp hospitality centres**

In 2010, Antwerp carried out a baseline survey of the hospitality centres in the city. The survey was designed to answer questions such as "Which strategic hospitality

centre is the largest?" or "What type of catering business can be found there?" This kind of information is key for investors, and the city intends to repeat the survey every three years.

At the same time new entrepreneurs are supported and coached by city officials to start their businesses. A new initiative is a 'hotel pilot' helping new accommodation investors to find suitable locations.

#### 2.1.3 Tourist information

Visit Antwerpen serves two visitor centres (TICs): one in the main hotspot of the city, the historical grand market square, and one in the central station. Both are open seven days per week. The offices serve around 200,000 visitors a year. There is a strong focus on serving the visitors in a hospitable, welcoming way in order to optimize the overall experience of the visitor in the city.

Figure 2.2 Tourist information office in the central station

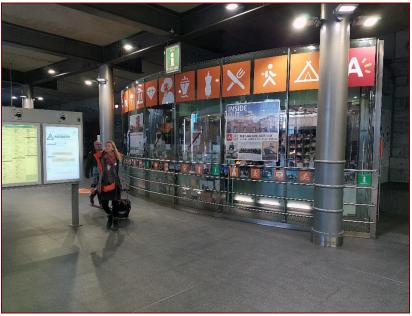


Image: author.

Visit Antwerpen also communicates on several digital platforms, including Twitter, Instagram and Facebook, and provides several very useful and up-to-date apps for visitors. Tourism promotion and information material is available in different languages, of which Flemish (Dutch), French, German and English are the most common. Information on public transport is provided in hard copy and available in the same four languages. Staff in the TICs is multilingual. The new and trendy "This is Antwerp" app is in English, and the "Atypical Antwerp" app in Dutch and English. Both apps are the result of cooperation with young creative companies.

The museums provide only limited information in foreign languages at their exhibits – something that is expected to improve. The local private tourist tram service provides

Dutch, French, German, English, Spanish, Italian, Russian, Japanese and Mandarin texts for its travellers and serves all hotspots in the city central area.

#### 2.1.4 Free WiFi

Free WiFi spots were set up during 2015 and 2016 in the city centre, providing coverage in the main tourist areas. This makes it much easier for visitors to consult Visit Antwerpen's different apps on their smart phones and tablets. The bicycle app "Velo" for bike rentals and the city's museum app provide excellent information and are a real companion for a visitor getting around the city. Young creatives are also encouraged by the city to develop new apps for use by residents and visitors alike.

Figure 2.3 Apps – 'This is Antwerp' and 'Atypical Antwerp'





Source: Google Play Store.

#### 2.1.5 Staff training

As in the other Cities of Art in Flanders – Bruges, Ghent, Leuven and Mechelen – the staff of the TICs are trained in how to promote visitor satisfaction. Satisfaction levels are also measured with regard to quality of service and information services, ease of access and other aspects of their stay in Antwerp. In the 2010 survey, 96% of visitors rated their overall satisfaction level as "good" or "excellent"<sup>2</sup>.

<sup>&</sup>lt;sup>2</sup> Guidea and Toerismevlaanderen (2010), Tevredenheid bij bezoekers van infokantoren

## 2.1.6 Signposting for visitors

There are signposts at several points around the city in different languages. Multilingual information is available in the three official languages of the country (Flemish/Dutch, French and German), but in most cases also in English. This is the case with the printed and digital material of Visit Antwerpen, but is also the case with regard to information panels at tourist sites, on public transport maps, etc.

Figure 2.4 Information panel



Image: author.

## 2.1.7 Cooperation

As the DMO, Visit Antwerp also is involved in dialogue with the industry. Since the roles and responsibilities of the public and private sectors in tourism are quite distinct, Visit Antwerp recognizes that public-private cooperation in marketing and destination development needs to be supported. It takes a leading role and organizes regular meetings for the industry, identifying industry needs and wishes and discussing the best ways of meeting these needs.

Since 2006 there has been a structured dialogue between the industry and the municipality of Antwerp, organized by Visit Antwerpen. Around 400 entrepreneurs from the hotel and catering industry, Antwerp Convention Bureau, guide

associations, Guild of B&B's, cultural institutions, local tour operators, event organizers, the World Diamond Centre, the airport and cultural heritage monuments are invited several times a year for discussions. An average of about 60 representatives of the private sector attend each of the meetings, which are held 4-6 times a year.

Policy discussions also take place through the official advisory board to the vice mayor, which includes representatives from the tourism industry. The Antwerp chapter of the Hotel and Restaurant Federation of Flanders (*Horeca Vlaandere*), is an important industry player in this context. Feed-back from the tourism and other industries is achieved through working groups, of which those for tourism, retail, hotel and catering and museums are the most important for tourism topics.

#### 2.1.8 Strategic planning

Antwerp has had a ten-year strategic plan for tourism for 24 years. The first was launched in 1993, creating awareness for tourism as an activity that can generate economic growth and job creation if supported at a political level.

The second plan, ended in 2015, had more measurable targets and a focused list of 37 actions – aimed at generating EUR 100 million turnover in ten years. The actions were to a large extent focused on enhancing the local tourism product. The aim was to make better use of and to support the existing core values of the city (an attractive city in which to live, a culturally rich city, and one good for shopping). The result was not publicly evaluated, but was translated into new government policies for the city. The EUR 100 million target was presumably not reached (the 400,000 bednights recorded in that period accounted for around EUR 60 million in spending<sup>3</sup>). But the general consensus was that there were a number of positive outcomes. And the city, its entrepreneurs and the inhabitants seem to have become much more confident that they live in and represent a city with a lot to offer tourists.

The third and latest plan (for 2016–2025)<sup>4</sup> has just been agreed and is based on the new overall marketing strategy of the city. It now specifies five-year targets within the ten-year strategy and reflects more realistic targets, based on continued steady growth in visitor numbers and visitor satisfaction levels, and more targeted marketing activities, both for the leisure and MICE markets.

Performance is now more easily measurable in terms of average length of stay (+4%), bednight volume (+23%), cruise passengers (+8%), number of same-day visitors (+15%), and also an increase in accommodation capacity in commercial

Author's calculations, based on reports of Kunststeden Vlaanderen WES (2012), Kunststedenonderzoek 2011.

11

Stad Antwerpen, Strategie Toerisme 2016-2015 eindrapport, available at: https://issuu.com/visitantwerpen/docs/strategie\_toerisme\_2016\_2025\_eindra

establishments (+8% including five-star accommodation)<sup>5</sup> and occupancy rate. Marketing is now more focused on the most prosperous source markets and lifestyle segments, and branding is aligned with that of the city's overall marketing strategy.

#### 2.1.9 Other collaboration

Toerisme Vlaanderen (Visit Flanders) is the regional tourism organization for Flanders. (In the absence of a Belgium Tourism Board, there are three regional bodies: Visit Brussels, Visit Wallonia and Visit Flanders). It is funded by the federal state of Flanders and, through different industry activities, the private sector. In addition to marketing and promotion, Visit Flanders conducts research on behalf of the industry, including data collection, visitor surveys and demand analysis. Visit Antwerp also cooperates with Visit Flanders in promotional campaigns, trade shows and technical visits.

The non-profit organization of the Cities of Art in Flanders (*Kunststeden Vlaanderen*) is a cooperative venture of the tourism departments of five cities (Antwerp, Ghent, Bruges, Mechelen and Leuven), all famous for their cultural history. This very effective cooperation started in 2011 and focuses on enhancing the joint efforts of the five DMOs in visitor information and management, and enriching the visitor experience in the different destinations. This is achieved through exchange of knowledge, joint research projects, collaboration in staff training, and organizing seminars with the industry. One area in which there have been successful outcomes is in addressing issues like handling visitor pressure.

# 3. Visitor behaviour and satisfaction

Visit Flanders has carried out a visitor survey in the Flemish Cities of Art every 5-6 years since 2000. The findings for the 2011 survey (the latest available) provide indepth information on the visitor profile to each of the cities (gender, age, social ranking, education level), purpose of trip, information sources, use of digital information devices, activities undertaken, satisfaction levels and intention for repeat visits. The survey covered both overnight and same-day visitors and was based on face-to-face interviews with leisure visitors over the period April to December 2011<sup>6</sup>

A summery of the findings for the city of Antwerp are shown below:

-

<sup>&</sup>lt;sup>5</sup> Note: there is no specific policy on the shared accommodation sector.

<sup>&</sup>lt;sup>6</sup> WES (2012), Kunststedenonderzoek 2011

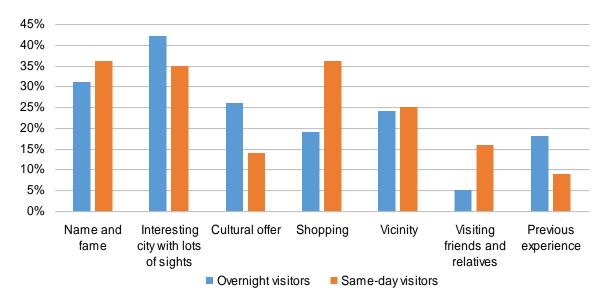


Figure 3.1 Visitors' motivation for travel to Antwerp, 2011

Source: WES (2012), Kunststedenonderzoek 2011.

#### Profile of overnight visitors

About one third (32.5%) had already visited Antwerp at some time in the five previous years. Two thirds were travelling without children and only 9.6% were in a group (a sharp drop since the previous survey).

Internet bookings accounted for 65% of the visitors, with the majority travelling to Antwerp by car, while 23% arrived by air, 23% by rail and 6% by coach. Antwerp's main appeal was its authenticity, well-preserved architecture (37%), charming atmosphere (26%), diverse activities (16%), shopping (16%), its cultural sites (15%), historical heritage (12%) and its friendly population (11%).

The main reasons for travelling to Antwerp were its attractions (42%), its image/reputation (31%, cultural offer (26%), easy access (24%), shopping (19%), previous experience (18%) and visits to relatives/friends (VFR) (5%).

Overnight visitors to the Flemish art cities in general (there was no data just for Antwerp) enjoyed walking around the city (96%), visiting restaurants (71%) visiting monuments and sights (67%), visiting churches (61%), relaxing in a café (64%) and visiting museums (38%). More than 46% were very satisfied and 53% satisfied with their stay. And the majority felt that the city offered good value for money.

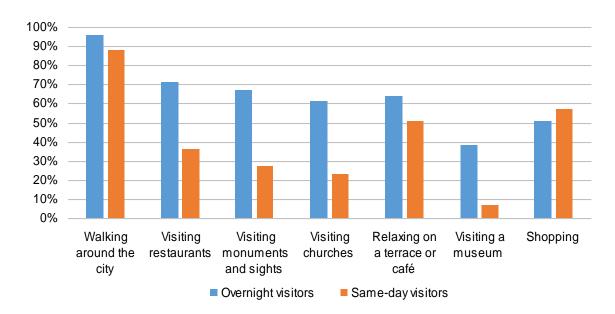


Figure 3.2 Activities during visitors' stay in the Flemish Cities of Art

Source: WES (2012), Kunststedenonderzoek 2011.

#### Profile of same-day visitors

Roughly two thirds (63%) of same-day visitors visiting had already visited Antwerp in the previous five years. Two thirds were travelling without children and only 4% were in a group. Average length of stay ranged from 5 hours (16%), to 5-8 hours (61%) and over 8 hours (24%, predominately young visitors aged18-24 years). More than 45% arrived before 11:00 in the morning, with 50% arriving by car and 42% by rail.

The main reasons for visiting Antwerp for same-day visitors were shopping (36%), the city's image (36%), city sights (35%), cultural attractions (14%), easy access (16%) and VFR (9%).

Activities of same-day visitors in the Flemish Cities of Art (no separate Antwerp figures available) were walking around the city (88%), visiting monuments and sights (27%) visiting churches (23%) and restaurants (36%), relaxing in a café (51%) and shopping (57%).

Same-day visitors in Antwerp are over 39% very satisfied and 57% satisfied with their stay. Also the price quality ration is considered to be good.

#### **Economic impact** 4.

Table 4.1 Performance criteria for tourism flows

Criteria	Data
Number of arrivals, 2015 <sup>a</sup>	1,078,148
	Domestic: 35%
	Foreign: 65%
Number of bednights, 2015 <sup>a</sup>	1,924,155
	Domestic: 33%
	Foreign: 67%
Average length of stay (nights) b	2.3
Arrivals by main purpose of trip (personal/business) <sup>a</sup>	55% personal
	45% business
Arrivals by mode of transport (air/water/land) b	47% car
	23% rail
	23% air
	6% coach
Average size of travel party <sup>b</sup>	1.8
Average occupancy rate in commercial accommodation (2015) <sup>c</sup>	73%
Number of major inbound markets <sup>a</sup>	6
Number of same-day visitors per month <sup>c</sup>	1,003,083
Meetings industry statistics <sup>d</sup>	21

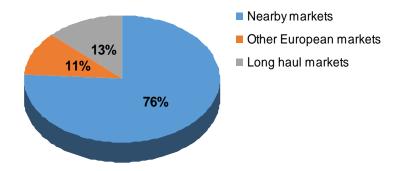
Sources: <sup>a</sup> Toerismevlaanderen (2016), *Tourism in figures XL;* <sup>b</sup> WES (2012), *Kunststedenonderzoek 2011;* 

#### 4.1 Tourism flows

#### 4.1.1 Visitor arrivals

As Antwerp is a major commercial hub in Belgium, situated on the main international corridors Paris-Amsterdam and Paris Cologne, it attracts visitors from all over the world. Residents comprise over 30 different nationalities. The main markets, generating 79% of overnights are: Belgium, the Netherlands, Germany, the United Kingdom, France and the United States.

Figure 4.1 Overnights by source market, 2015

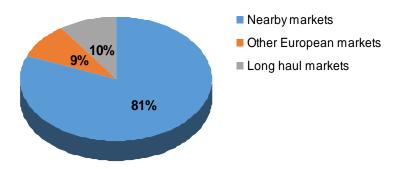


Source: Calculations based on figures from FPS Economy, Directorate-General Statistics.

<sup>°</sup> Stad Antwerpen, *Stad in cijfers*, available at: https://stadincijfers.antwerpen.be/databank/

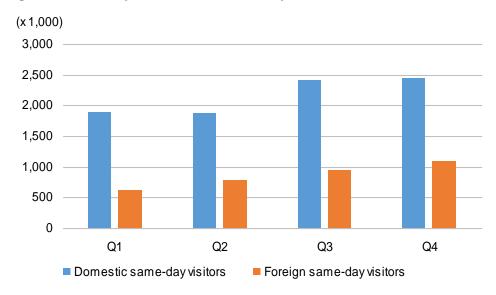
<sup>&</sup>lt;sup>d</sup> International Congress and Convention Association (2016), ICCA Statistics Report 2015, The International Association Meetings Market 2015, available at: www.iccaworld.org/dcps/doc.cfm?docid=1951

Figure 4.2 Arrivals by source market, 2015



Source: calculations based on FPS Economy, Directorate-general Statistics.

Figure 4.3 Quarterly breakdown of same-day visitors, 2016



Source: Stad Antwerpen, Stad In cijfers, available at: https://stadincijfers.antwerpen.be/databank

The number of same-day visitors varies from month to month and by quarter, as shown above, with an average of just over 1 million arrivals per month. Two-thirds of these visitors are domestic (travelling from more than 20 kilometres outside the city), and between 25% and 33% are foreign.

#### 4.1.2 Conferences and events

Antwerp is Belgium's second most important city for conferences and events after Brussels. No less than 25% of all overnights in Antwerp are linked to the MICE segment. It offers good conference facilities directly linked to the city's major hotels.

Until now, Antwerp has handled mainly small to medium-sized conferences and events. But with the opening of the refurbished Queen Elisabeth Hall in 2017 as the Flanders Meeting & Convention Centre Antwerp, and as part of the renovation and expansion of the concert and meeting facilities next to Antwerp's Central Station and

Antwerp Zoo, the city will be able to host major international conferences with up to 2,000 participants. The local government also invested in this project.

Figure 4.4 The newly opened conference centre



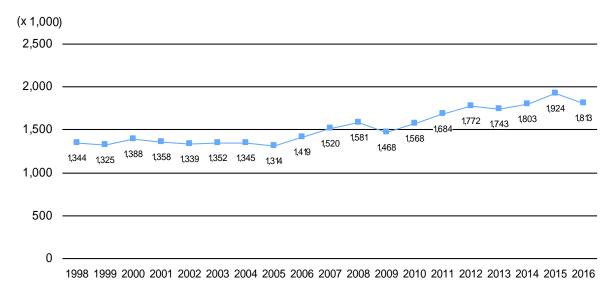
Image: author.

#### 4.1.3 Tourism development

In terms of its tourism ranking in Belgium, Antwerp is third in bednights and second in Flanders, with 1.9 million overnights (2015), of which 63% are foreign. The total number of arrivals is 1.1 million, of which 55% on leisure trips, 27% for MICE, and 18% traditional business and other. The last 20 years have seen fairly stable, albeit modest, growth in numbers of 1.8% per annum with no marked peaks or troughs.

The hotel sector provides most of the bed capacity data and there is limited information of the use of other forms of accommodation. It should be noted that foreign bednights in Belgium overall have hardly increased in the last 18 years, due to a decline in demand for Brussels and Flanders. The terrorist attacks in Brussels in early 2016 were also very detrimental to tourism..

Figure 4.5 Trend in number of bednights in hotels from 2011 to 2015



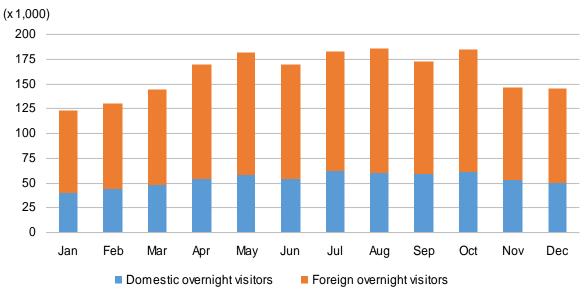
Source: Stad Antwerpen, Stad In cijfers: available at: https://stadincijfers.antwerpen.be/databank/ (10-08-2017)

The city attracts around 12 million same-day visitors a year, one quarter of whom are foreign. Both domestic and international same-day visitor arrivals, which are tracked through GPS, have been growing since the beginning of 2016 (+9%).

The authorities are satisfied with the rate of tourism development, which is in line with urban development generally. Visitor pressure in the city (bednights per inhabitant) increased by only 15% in the last ten years.

#### 4.1.4 Seasonality

Figure 4.6 Overnight stays in hotels by month, 2015



Source: Toerismevlaanderen, *Toerisme in cijfers 2015 XL*, *per maand*, available at: www.toerismevlaanderen.be/toerisme-cjfers-2015-xl

As already indicated, seasonality is not really a problem. In 2015, average room occupancy varied from 58.6% in January to 83.2% in September, with peaks in June, September and October. In 2015 the individual business segment accounted for 42.6% of roomnights, with MICE at 8.5%, the individual leisure market for 38.2%, and group tourists for 10.8%. This explains why the peaks are in June, September and October<sup>7</sup>. Based on the number of overnights, the vast majority of tourists stay in hotels, as shown below.

(x1,000)2,000 ■ Domestic \_\_ 1,800 Foreign 1,600 ■ Total 1.400 1,200 1,000 800 600 400 200 0 B&B Cottages Hotels Youth Other accommodation

Figure 4.7 Overnight stays by type of accommodation, 2015

Notes: Figures for campsites and holiday parks are not available; figures for B&Bs represent only registered ones. Source: FPS Economy, Directorate-general Statistics, available at: statbel.fgov.be/nl/modules/publications/statistiques/arbeidsmarkt\_levensomstandigheden/toerisme\_per\_land\_van \_herkomst\_en\_per\_type\_accomodatie\_2014.jsp

#### 4.1.5 Occupancy

Table 4.2 Trend in hotel room occupancy, 2008-2016

Year	Percentage
2008	66
2009	59
2010	66
2011	65
2012	68
2013	71
2014	72
2015	73

Source: Toerismevlaanderen (2017), Te gast in Vlaanderen 2011-2015.

7) Holthof, C. and Tilburg van, S. (2016), Hotel rapport 2015, Toerismevlaanderen, Brussel

#### 4.1.6 Cruises

Antwerp has become a main North European cruise port, receiving 22 seagoing vessels and 689 river cruisers in 2016.

Special investments have been made to facilitate the mooring of cruise vessels and the handling of passengers in a new cruise terminal, constructed in a former industrial shipping zone, and next to the city's main attractions and city centre. A new cruise terminal is planned for 2020 slightly north of the existing one. Boosting cruise tourism for its perceived above-average visitor spending was a main goal in of Antwerp's second Strategic Tourism Plan 2006-2015.

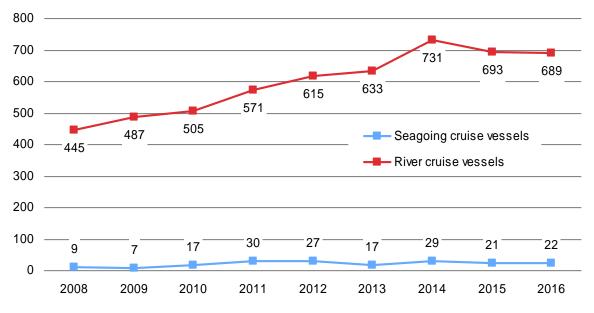
Cruise passengers in Antwerp are registered as same-day visitors, as they stay overnight on board the vessels. In terms of passenger numbers, 16,429 arrived by seagoing cruise vessels (2016) and 88,056 on river cruisers. Overall cruise visitor numbers reached 104,485. Although but this is a modest number compared with the overall visitor count, Antwerp has shown cities like Amsterdam that cruise development can boost the regeneration of port areas and contribute to the promotion of a destination. It also revitalizes the history of these destinations.

Table 4.3 Cruise arrivals in Antwerp, 2016

	Vessels	Passengers
Sea cruise vessels	22	16,429
River cruise vessels	689	88,056
Total	711	104,485

Source: Stad Antwerpen, aantal zeecruises/riviercruises; aantal passagiers zeecruises/riviercruises, Stad In cijfers: databank available at: https://stadincijfers.antwerpen.be/databank/ (28-07-2017)

Figure 4.8 Trend in cruiser arrivals in Antwerp, 2008-2016



Source: Graph based on Stad Antwerpen data available at: https://stadincijfers.antwerpen.be/databank

# 4.2 Economic impact

Table 4.4 Performance criteria regarding the economic impact of tourism

Criteria	Data
Number of jobs in the tourism industry, 2012 a	20,672
Contribution of tourism to the destination's economy (% of GDP) b	2.15%
Contribution of tourism to jobs in the local economy b	5.9%
% of tourism jobs that are seasonal	not available
Economic impact of events tourism	not available
Inbound tourism revenues per visitor by source market	not available
Daily spending per overnight visitor <sup>a</sup>	EUR 155
Daily spending per same-day visitor <sup>c</sup>	EUR 79
Exports of tourism services	not available

Note: Tourism is not registered as a defined sector, so data on tourism is only available through incidental surveys. Sources: <sup>a</sup> Toerismevlaanderen (2014), *Toerisme in cijfers 2013, rapport kunststeden* 

## 4.2.1 Gross domestic product

Belgium's gross domestic product (GDP) was EUR 479,122 million in 2015, up from EUR 356,125 million in 2010. Of the 2015 figure, 16% (EUR 75,365 million) was generated in the Province of Antwerp.

Table 4.5 Belgium's Gross Domestic Product, 2015

	GDP in EUR million (2013)	Percentage of total
Province of Antwerp	75,365	16%
Brussels Capital	71,744	15%
Belgium	479,122	100%

Source: Koema World Data Atlas Belgium at https://knoema.com/atlas/Belgium (10-08-2017)

The most important elements in Antwerp's economy are the petrochemical, logistics and knowledge sectors. The added value generated by tourism is more modest, but still on a par with that of the fashion and diamond sectors (all around EUR 300 million). However, in the new city marketing strategy, visitors are seen as making an important contribution to the other industries, so a direct comparison of value added is not realistic as a way of judging the value of tourism to Antwerp's economy.

Belgium's economy is closely integrated in Europe's. In recent years, its growth has generally been very slightly faster than the Eurozone's.

#### 4.2.2 GDP per capita

At purchasing power parities (PPPs) the available figures suggest that Belgium's GDP per capita is 12% higher than the European average. And within Belgium, Antwerp stands out with a GDP per capita that is 47% higher than the EU average.

<sup>&</sup>lt;sup>b</sup> Maesschalck de, P. and Weekers, K., Studiedienst Vlaamse Regering,(2014) TSA (Tourism Satellite Account) Flemish Region and Brussels-Capital Region 2014 Executive Summary

<sup>&</sup>lt;sup>c</sup> WES (2012), Kunststedenonderzoek 2011

Table 4.6 GDP per capita at purchasing power parities, 2013

	Indices
Europe	100
Euro 18	107
Belgium	120
Province of Antwerp	158

Sources: Koema World Data Atlas Belgium; Eurostat.

# 5. Social and cultural perspective

#### 5.1 Attractions

Table 5.1 Performance criteria for Antwerp's attractions

Criteria	Data
Number of cultural resources/attractions, 2016 A	71
(theme parks, museums, zoos, churches, ETC)	
% of municipal budget allocated to culture, 2017 <sup>B</sup>	5%
Conservation/enhancement of the cultural infrastructure (investment into refurbishing and/or building new attractions)	na
% of local heritage in need of improvement	na

Sources: <sup>a</sup> Bosman, T., manager destination development Stad Antwerpen, conversation with the author (27-07-2017) <sup>b</sup> Calculations based on Stad Antwerpen (2017), *Jaarrekening 2016* 

#### 5.1.1 Fashion

Antwerp has developed into one of the most important European trendsetters in the fashion world. Its reputation dates back to the emergence in the 1980s of six fashion designers who have earned international fame and notoriety – the "Antwerp Six". The Six drew international attention to Antwerp, which led to the emergence of a new generation of designers. Fashion is one of the main shopping interests of visitors in general.

#### 5.1.2 Diamonds

Antwerp is the nerve centre of a global network coordinating the transformation of rough diamonds into the sparkling showpieces sold in jewellery shops around the globe. Some 80% of the world's rough diamonds and 50% of its polished diamonds are traded in the city. A new diamond museum is under construction after the previous one closed some time ago. There are city walks through the diamond quarter. The diamond trade has been socially and culturally very important to the city for a very long time, but its role in attracting tourists to the city is limited.

#### 5.1.3 Culture

Antwerp is also a genuine cultural magnet. In the 17<sup>th</sup> century many famous painters, sculptors, instrument builders and printers were born and lived in Antwerp – Rubens, Jordaens, Van Dyck and Jan Breughel II (the Younger), to name just a few. These artists, and others, have shaped the city's cultural heritage into a unique legacy whose riches are preserved and exhibited in the main museums and churches in and around the city.

This cultural legacy continues to this day. Antwerp's brand new Red Star Line Museum in the north district invites one on an eventful journey in the footsteps of emigrants, a journey into the past and an encounter with the present. Located close to the municipal *Museum aan de Stroom* museum, the new port authority building creates a 'bridge' between the port and the city. It is also a high-end architectural open house that one can freely walk in and out of.

Antwerp's contemporary scene is also teaming with artistic life, with both world-famous and yet-to-be discovered artists, with a wide variety of theatres, cinemas, galleries, dance and concert halls, with large well-established cultural production houses and experimental projects, and with provocative and intimate architecture.

Large theatres and opera houses include the Flemish Opera, the international Art Centre 'de Singel', the Queen Elisabeth Auditorium, the City Theatre and the Bourla Playhouse.



Figure 5.1 Development of Eilandje with the MAS Museum

Image: Stad Antwerpen.

#### The creation of a new city quarter, Het Eilandje

Antwerp's former harbour area, Het Eilandje, breathes water and exudes charm. Since wholeheartedly embracing its maritime history through projects such as the MAS and the Red Star Line Museum, a gust of rejuvenation has blown through the neighbourhood. Coffee bars, artist ateliers, and stunning architectural projects have popped up left and right, making the area a must-visit when in Antwerp.

The redevelopment of the former port area in the north of the city is a classic case among many harbour cities in Europe. New challenges arise in finding new functions for old harbours and buildings.

It took some time to discuss ideas, to gain enough support and to allocate a budget, which materialized in 1997. The opening in 2011 of the 'Museum aan de Stroom' or 'MAS', the municipal museum of Antwerp, telling the story of its rich history, was a major milestone. An attraction and crossing between East and West, North and South, between inhabitants, business people and visitors. The ideas of a cultural axle were then further supported by the Red Star Line Museum, dedicated to the emigration flows from Europe towards the new world in the 19<sup>th</sup> and 20<sup>th</sup> century.



Figure 5.2 New Port Authority building

Image: Port of Antwerp.

### 5.2 Events

The total number of events held in the city, whether aimed at inhabitants or visitors, was 11,664 in 2015. Exhibitions accounted for a further 1,726<sup>8</sup>.

These figures point to a small but steady growth in the last couple of years to 2015. And the new city marketing strategy is targeting an increase in events for the domestic and international markets. To this end a special event team has been put in place at Visit Antwerpen to develop the business.

Table 5.2 Performance criteria for events

Criteria	Data
Emphasis – more on business or leisure events?	Leisure
National vs. international events?	Not available
Stability, growth or decline in terms of interest for hosting the events in the city – trend over the past 5 years?	Growth
Event visitation trend	Stable
% of the events that are focused on traditional/local culture and heritage	Not available

Source: Bogaert, A., Director Business and City Marketing, Stad Antwerpen, conversation with the author (20-04-2017).

Figure 5.3 Folklore events in the city



Image: author.

\_

Stad Antwerpen evolutie uit activiteiten in stad Antwerpen (2015), Stad in cijfers: databank available at: https://stadincijfers.antwerpen.be/databank/ (28-07-2017).

# 5.3 Community attitudes to tourism

Antwerp and its people are proud of their city and generally welcome visitors. This was helped in no small way by the community-focused promotions conducted by the municipality from 2005<sup>9</sup>.

Table 5.3 Performance criteria for community attitudes

Criteria	Data
Analysis of the community attitudes towards tourism	First survey (2017) is not yet published
% of residents satisfied with the impact of tourism on the destination's identity	First survey (2017) is not yet published
Number of tourists per 100 residents	207
Number of same-day visitors per 100 residents	2,319
Number of beds in commercial accommodation establishments per 100 residents	2.2

Source: Calculations based on several tables in Stad Antwerpen, Stad in cijfers: databank available at: https://stadincijfers.antwerpen.be/databank

Since there is always a risk of tension between visitors and the local population in tourism hotspots, Antwerp remains alert to the importance of assuring buy-in from the community by continuing to promote the tourism's value for the city. The city also takes a very pro-active role in ensuring a good visitor spread across the city, so that tourism has a positive social and economic impact on all neighbourhoods.

Figure 5.4 The brand logo of Antwerp since 2005



Image: Stad Antwerpen.

The 2015 report of the European Commission shows that the inhabitants are satisfied with their quality of life and greatly appreciate the health and sporting facilities, schools and other services available in their city<sup>10</sup>.

<sup>9)</sup> Bogaert, A., Director Business and City Marketing, Stad Antwerpen, conversation with the author (20-04-2017)

<sup>&</sup>lt;sup>10</sup>) European Commission (2016), *Quality of life in European Cites 2015* 

#### **Environmental perspective** 6.

#### Sustainable tourism policies and strategies 6.1

Table 6.1 Performance criteria for sustainable tourism policies and strategies

Criteria	Data
% of tourism enterprises/establishments in the destination using voluntary certification/labeling for environmental/ quality/ sustainability and/or corporate social responsibility	Around 10%
% of tourism enterprises involved in climate change mitigation schemes and 'adaptation' responses and actions	not available
Tools in place for monitoring the environmental impact (degradation/conservation of nature) of tourism	✓

Nine tourist establishments in Antwerp are participating in the Green Key initiative (see below). Some hotels have installed water recycling plants. And the Hotel Association of Antwerp is working on reducing energy consumption in the sector<sup>11</sup>.

In February 2017 a low emission zone for motorized traffic in the city centre was introduced<sup>12</sup>.

Nature conservation regulations have been set by the local government for nature areas, but also for currently empty business parks. If flora and fauna are discovered in protected or unoccupied areas, they can be the subject of special preservation and monitoring schemes, and future industrial development can even be blocked.

#### 6.2 Greenhouse gas reduction and energy efficiency

Table 6.2 Performance criteria for greenhouse gases and energy efficiency

Criteria	Data
Total greenhouse gas emissions emissions per capita in the city, 2012 (based on port area emissions) <sup>a</sup>	34.68 CO <sub>2</sub> eq
% of total energy consumed in the city that comes from renewable sources, 2015 b	6%² (2015)
Energy consumption per tourist night compared to general population energy consumption per resident night	not available
% of tourism enterprises that act to reduce energy consumption	not available

Sources: <sup>a</sup> Port of Antwerp, Greenhouse Gas Emissions, available at:

www.sustainableportofantwerp.com/en/content/energy-and-climate/greenhouse-gas-emissions

Gewest Vlaanderen (2016), Inventaris hernieuwbare energie in Vlaanderen 2015

<sup>&</sup>lt;sup>11</sup>) Source: Brocatus, D., chairman Horeca Vlaanderen, chapter of Antwerp, conversation with the author

<sup>&</sup>lt;sup>12</sup>) Source: Stad Antwerpen (2017), Lage-emissiezone Antwerpen: sinds 1 februari 2017, available at: www.antwerpen.be/nl/info/553e39fccaa8a7fe0f8b45c6/lage-emissiezone-antwerpen-vanaf-1-februari-2017

#### 6.2.1 Renewable energy sources

In Flanders, the share of renewable energy (green electricity, green heat, biofuels for transport) against energy consumption more than doubled from 2008 to 2015 – from 2.9% to 6.0%. The share of green electricity tripled in the same period.

#### 6.2.2 Greenhouse gas emission reduction

The only available figures on greenhouse gas (GHG) emissions are from the main industrial area in Antwerp. CO<sub>2</sub> emissions by industry and refineries have been falling steadily since 2008, but they were still 2.1% higher in 2013 than in 2000. However, over the period 2000–2013, production has become more CO<sub>2</sub>-efficient.

Total GHG emissions (i.e. the sum of  $CO_2$ ,  $CH_4$  and  $N_2O$  emissions) by manufacturing industry, power plants, transport and freight handling activities over the past few years shows a similar trend. Since 2000 the carbon footprint has been falling steadily and in 2012 it was 8.8% lower than in 2000. The largest contribution was made by the reduction in  $N_2O$  process emissions in 2008.

#### **Green Key**

Eight hotels and one attraction in Antwerp are working under the Green Key certification for tourism enterprises. Green Key is the largest and most respected international certification system for environmentally friendly tourism companies. Green Key-certified companies commit to sustainable operations, as well as respecting minimum social conditions for staff and guests. A 100-point checklist is reviewed annually.

Green Key is a voluntary eco-label scheme that has grown from a national initiative in Denmark in 1994 to more than 2,600 hotels and other establishments in 56 countries, mainly in Europe. UNWTO is a partner of Green Key.

Green Key certification represents a commitment by businesses that their premises adhere to the strict criteria set by the Foundation for Environmental Education. There are six Green Key categories – for hotels and hostels, campsites and holiday parks, small establishments, conference centres, restaurants and attractions – covering 13 criteria: staff involvement, environmental management, guest information, water, energy, washing and cleaning, food & beverage, waste, administration, indoor environment, green areas, green activities, and corporate social responsibility. Most criteria are imperative; a few are considered to be guidelines. Certified establishments must meet an increasing percentage of guideline criteria depending on the number of years of involvement in the Green Key programme.

# 6.3 Mobility

Table 6.3 Performance criteria with regard to mobility

Criteria	Data
Transportation modes (based on daily use by % of population) <sup>a</sup>	Car 43% Bicycle 20% Public transport 13%
Average commuting time and cost	not available
% of tourists and same-day visitors using different modes of transport to arrive at the destination	not available
% of tourists and same-day visitors using local/soft mobility/public transport services to get around the destination	not available
Average travel (km) by tourists and same-day visitors from home to the destination	not available
Average carbon footprint of tourists and same-day visitors traveling from home to the destination	not available
Number of EV charging stations within the city	33
Kilometres of bicycle paths and lanes b	> 700 kilometres
Car sharing <sup>c</sup>	Yes (initiated by private companies)
Bicycle sharing <sup>c</sup>	Yes

Sources: <sup>a</sup> OVG Antwerpen (2001), Analyse personenvragenlijst, Provinciale Hogeschool Limburg, Diepenbeek;

Public transport and low-emission transport are promoted in Antwerp. A special website (www.slimnaarantwerpen.be) provides information on alternative ways of getting to the city. The Ring Ring initiative encourages citizens to use their bicycles when travelling in the city, enabling them to collect credit points when they do.

Visitors can purchase an attractively priced daily Rover card, and the Antwerp City Card also includes public transport. Car sharing is provided by a private company as well as individual citizen schemes. There are 84 pickup points for cars.

Figure 6.1 Bicycle rental for inhabitants and visitors



Image: author.

<sup>&</sup>lt;sup>b</sup> Stad Antwerpen, verkeer en parkeren (2015), available at:: www.antwerpen.be/nl/overzicht/fietser/beleid;

<sup>&</sup>lt;sup>c</sup> Stad Antwerpen, stad in cijfers mobiliteit: available at: https://stadincijfers.antwerpen.be/databank

Velo Antwerpen, a private initiative from 2011, has over 3,000 bicycles available for rent at 259 self-service stations in the city. It plans to increase the number to 300 stations with 3,600 bicycles over the next two years. An app provides details on availability. The service can also be used by visitors who want to discover the city on their own. Like other bicycle rental services, it is promoted on the Visit Antwerpen website.

# 7. Technology and new business models

# 7.1 The sharing economy

Table 7.1 Performance criteria with regard to the sharing economy

Criteria	Data
Number of shared accommodations (i.e. B&B, couch surfing) <sup>a</sup>	>1.000
Car sharing platforms <sup>b</sup>	Yes (initiated by private companies)
Car and bike sharing platforms <sup>c</sup>	Bike: Yes
Number of shared bicycles per capita, number of shared vehicles per capita	Not available
Consumers selling guiding services in place (e.g. paying a local for a guided tour)?	Not available
Car-pooling (consumers trading their own vehicles and/or selling transfer services) in place?	Not available

Sources: Estimate based on various analyses of the B&B sector;

Estimates for the number of accommodation establishments for the sharing economy in Antwerp are based on various B&B analyses. There is a fairly big couch surfing community, but as with unregistered B&Bs, they are difficult to trace. And there is no specific legislation governing this type of accommodation.

<sup>&</sup>lt;sup>b</sup> Cambio Autodelen, available at: www.cambio.be/en

<sup>&</sup>lt;sup>c</sup> Velo Antwerpen, avalaible at www.velo-antwerpen.be/en

## 7.2 The smart city

Table 7.2 Performance criteria regarding Antwerp's status as a smart city

Criteria	Data
Number of open Wi-Fi spots per km <sup>2</sup> :	
<ul><li>in city centre<sup>a</sup></li></ul>	30
<ul><li>in other areas</li></ul>	not available
Active programmes to introduce sensor s in infrastructure systems	✓
Active programmes to introduce single operations centres using real-time data for ambulance, emergency/disaster response, fire, police, weather, transit and air quality monitoring services <sup>b</sup>	✓
Online reputation/brand measurement <sup>b</sup>	✓
Use of online information and booking services from within destination <sup>c</sup>	✓

Sources: <sup>a</sup> Hofstraeten van, D., Expert Detailhandel Investdesk Stad Antwerpen, conversation with the author (20-04-2017);

Stad Antwerpen, *Vlaanderen en IMEC bouwen samen aan een smart city proeftuin*, available at: www.ondernemeninantwerpen.be/nieuws/stad-antwerpen-vlaanderen-en-imec-bouwen-samen-aan-een-smart-city-proeftuin

#### 7.2.1 'Smart city' initiatives

Since January 2017 the Antwerp municipal government has introduced a number of smart city initiatives. The city plans to distribute hundreds of sensors across the city in parking lots, garbage bins, water pipes, and even residents' boilers, so as to facilitate Internet connectivity for all app developers and public users. Sensors are also installed in traffic systems, public lighting systems and monitoring air quality in the city.

#### 7.2.2 Crowd monitoring

Since 2016, in cooperation with mobile phone providers, the city has been monitoring visitor movements across the city centre, especially during large events, and is able to provide real-time public transport data to those who need it.

Crowd monitoring, or measuring the presence and movements/trends of visitors and passengers, has become an important tool for city marketing in recent years. Antwerp uses such data to measure the impact of, among others, its tourism and economic policy. During events, the data is also used to further visualize mobility and security and, if necessary, take actions.

Counting shoppers through WiFi sensors: This method of counting shoppers
is based on the Bluetooth and/or WiFi signals emitted by mobile devices. After
initial testing at three measuring points, there are now 25 across the city, allowing
the local authorities to get a better view of crowds in shopping areas so as to

<sup>(20-04-2017); &</sup>lt;sup>b</sup> Antwerpen wordt eerste smart city: stad gaat overal sensoren verstoppen, 2017, available at: //www.nieuwsblad.be/cnt/dmf20170105\_02658649, and:

<sup>&</sup>lt;sup>c</sup> Bogaert, A., Director Business and City Marketing, Stad Antwerpen, conversation with the author (20-04-2017)

- gauge, for example, the effect on crowds of store sales periods, monthly Sunday shopping, and various special events in the city centre.
- Counting tourists and visitors using mobile data: A second method of measurement uses mobile data the signals received by mobile phone masts. These give insight into the size of visitor flows, their origin and their average duration of stay. This data can also be used for safety and security purposes during major events such as the Giants of Royal de Luxe or Antwerp 10 miles.

#### **Examples of data retrieved through crowd monitoring:**

- During the July and August 2015, 420,000 holiday visitors were counted in the city. Unlike the FPS Economy's overnight figures, this figure includes VFR stays and those opting for couch surfing, B&Bs, etc.
- In the same two months, 2 million same-day visitors were counted in the city, of whom 71% were Belgians.
- The origin of these same-day visitors was identified. 56% of foreign same-day visitors came from the Netherlands (331,000). The balance came predominantly from other neighbouring countries, sometimes taking holidays in Belgium outside Antwerp.
- 44% of the foreign tourists in the centre of Antwerp came from the Netherlands.
   Together with Germans, French and British, they represented 70% of total foreign nights in Antwerp.
- During the holiday season, most visitors are counted on Saturdays.
- On average at the Meir (the city's main shopping promenade) there are an average of 1.3 million visitors a month, or around 16 million a year.
- Since the start of Sunday shopping in September 2014, there have been an average of 45,000 shoppers or passers-by at the Meir on Sundays, compared with 60,000-70,000 on Saturdays.<sup>13</sup>

# 7.3 Open data

Table 7.3 Performance criteria with regards to open data

Criteria	Data
Number of mobile apps available (iPhone) based on open data	not available
Existence of official citywide privacy policy to protect confidential citizen data	✓
	(federal regulations apply)

Stad Antwerpen (2016), Nieuwe metingen van bezoekers en passanten bevestigen populariteit Antwerpen, 16-09-2016, available at: www.ondernemeninantwerpen.be/nieuws/nieuwe-metingen-van-bezoekers-en-passanten-bevestigen-populariteit-antwerpen (28-07-2017).

The city of Antwerp pursues an open data philosophy – data is accessible for everybody (https://opendata.antwerpen.be). A good example is the dashboard providing actual and interactive data on various items, which the city makes freely available <sup>14</sup>. For tourism there are figures available on KPIs, such as number of bednights, arrivals, cruise passengers, gross room occupancy, and TIC visitors. Other data is accessible by clicking through the dashboard, where graphs can be retrieved and data can be downloaded in different formats.

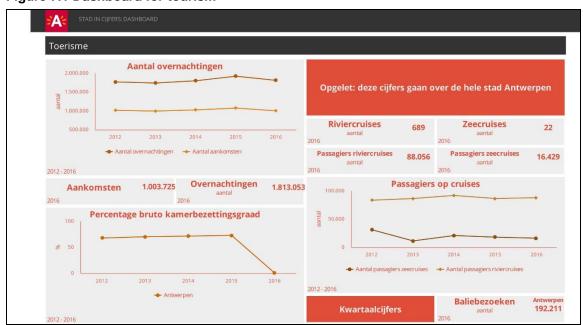


Figure 7.1 Dashboard for tourism

Source: Stad Antwerpen, Stad in Cijfers, at https://stadincijfers.antwerpen.be/dashboard/Toerisme--toerisme.

# 8. Concluding remarks

As a tourism destination Antwerp is a hidden gem. The city has a lot to offer, has worked hard on its infrastructure and its tourism product and services. It is still achieving only modest, if steady, annual growth, but the result of this is that tourism development has not been disruptive, but rather balanced.

Antwerp's new city marketing strategy and the proactive role of the city government, including the DMO Visit Antwerpen, to develop an attractive city for inhabitants, businesses and visitors, will continue to be successful long term. Their integrated approach will promote more than just tourism development: it could lead to an increased number of businesses setting up in Antwerp due to the enhanced image as an attractive city in which to live, work and study.

<sup>&</sup>lt;sup>14</sup> Stad Antwerpen, stadincijfers, available at: https://stadincijfers.antwerpen.be/databank.

The local authorities have shown that leadership is essential in developing a destination, and have found a different, unusual way of presenting itself as a "edgy" city. Future promotional campaigns will involve an increasingly large number of stakeholders to ensure that tourism and urban development generally reflects the will of the people.

But there are also a number of challenges ahead:

It takes time for the city branding campaign to create awareness among potential visitors. Active marketing to create a sense of urgency among them is needed in addition to the brand campaigns.

The link with the more mainstream tourism promotion of Visit Vlaanderen will be a challenge, because the city's new brand does not fit so easily into the regional promotion themes. Other cities with their own branding campaigns have encountered similar problems.

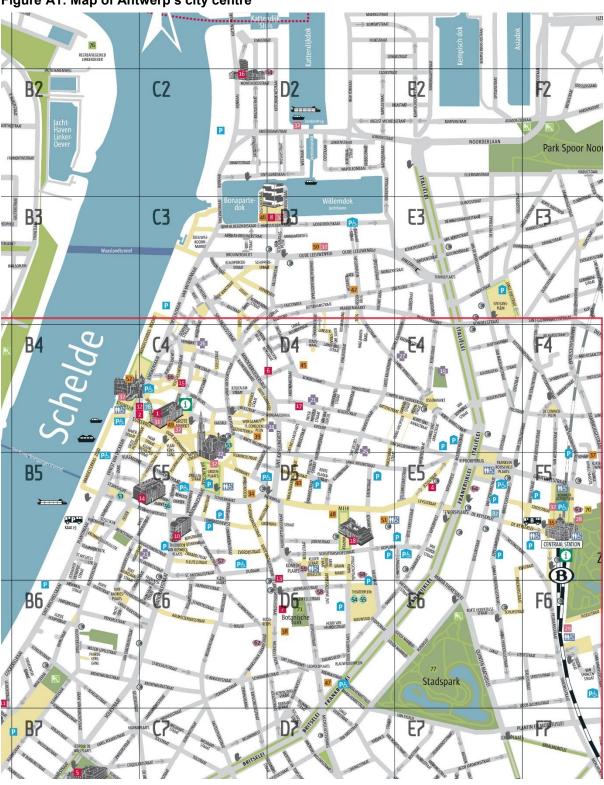
The structure of the city and regional governments and the distribution of responsibilities among the members of the city's executive board is crucial to effective action. In Antwerp, mobility and economic development are currently combined in one department, facilitating cross-over benefits and synergies. Continuous attention will be needed in the coming years to adjust these functions to meet changing circumstances.

Public sector (i.e. city government) support for new and existing entrepreneurs is not always perceived as helpful by the private sector. But the private sector (especially in sectors where, as in tourism, large numbers of SMEs are involved) often lacks the attitudes, resources and capabilities to provide 'public goods'. Cooperation between the public and private sectors is essential for city marketing and development. Competition between cities (in tourism, and in attracting new businesses and communities) is becoming ever fiercer, so stakeholder management and engagement is also ever more important. 'Co-makership' is an essential trend in hospitality and destination building.

Vast quantities of data are now collected and shared, enabling substantiated decision-making in public administration, in the private sector and among entrepreneurs, creative professionals and academics. But not all data are harmonized and integrated (this needs large budgets and large amounts of manpower). This would allow more interesting information to be retrieved and used in analysis and decision-making. A missing item on the research side is a proper structure for visitor surveys: frequent qualitative (in addition to quantitative) data collection on visitor awareness, orientation, motivation and actual behaviour is very important for destination management and marketing.

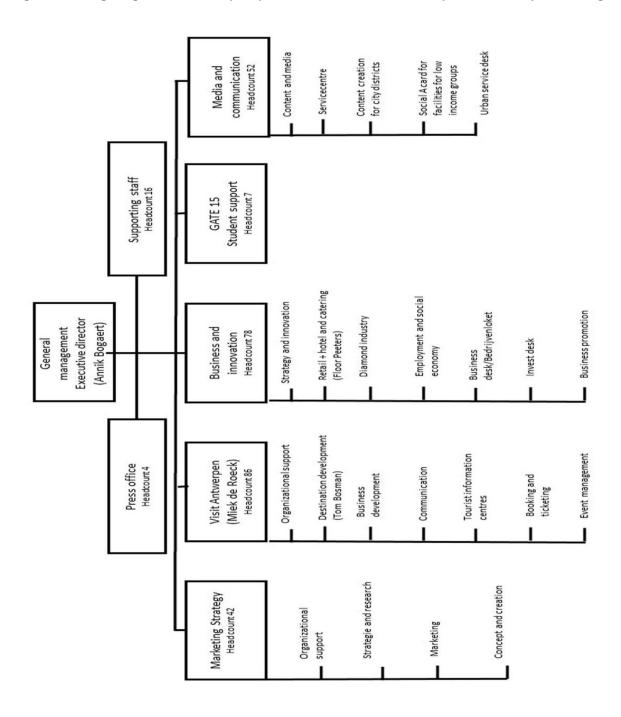
# **Annex A: Antwerp city centre map**

Figure A1: Map of Antwerp's city centre



# **Annex B: Organogram**

Figure B.1: Organogram of Antwerp Department of Business Development and City Marketing



## **Annex C: Other indicators**

#### C.1 Community engagement

Table C.1 Performance criteria for community engagement

Criteria	Data
Participation in the community engagement programmes	Not available
% of the employees in direct tourism employment who are local	Not available

### C.2 Gender equality

Table C.2 Performance criteria for gender equality

Criteria	Data
% of men and women employed in the tourism sector	60% male:40% female
% of tourism enterprises in which the general manager is a woman	Not available

Source: Maesschalck de, P. and Weekers, K., Studiedienst Vlaamse Regering (2014) TSA (Tourism Satellite Account) Flemish Region and Brussels-Capital Region 2014 Executive Summary

#### C.3 Inclusion

Table C.3 Performance criteria for social inclusion

Criteria	Data
% of businesses that have a budget for accessibility improvements	Not available
% of rooms in commercial accommodation establishments accessible for people with disabilities	Not available
% of commercial accommodation establishments participating in recognized accessibility information schemes	Not available
% of public transport that is accessible for people with disabilities and specific access requirements <sup>a</sup>	40% of trams 80% of busses
% of tourist attractions that are accessible to people with disabilities and/or participating in recognized accessibility information schemes <sup>b</sup>	More than 50%

Sources: <sup>a</sup> 1) De Lijn (2017), *Toegankelijkheid*, available at: :www.delijn.be/nl/overdelijn/organisatie/zorgzaam-ondernemen/toegankelijkheid

Accessibility for handicapped has been a concern of the public sector since 1998 and several supporting programmes have been implemented since then. Subventions are available for the tourism industry in Flanders for accessibility improvements, but structured figures for the sector are not yet available <sup>15</sup>.

<sup>&</sup>lt;sup>b</sup> Bosman, T., manager destination development Stad Antwerpen, conversation with the author (27-07-2017)

\_

<sup>&</sup>lt;sup>15</sup>) Source: Bosman, T., manager destination development Stad Antwerpen, conversation with the author (20-04-2017)

#### C.4 Safety & Security

Table C.4 Performance criteria for safety & security

Criteria	Data
Comparison of crime rates between the high and the low season periods	not available
Comparison of crime rates between the tourist centres and other parts of the city	see below
% of tourists who register a complaint with the police	not available

Crime rates in Antwerp have been going down each year during the last five years, with the exception of theft of vehicles or from cars. The city centre, including the tourist centre, registers 2.1 times more crime than the suburbs.

#### C.5 Authenticity

Table C.5 Performance criteria for authenticity

Criteria	Data
Neighbourhood tourism versus built artificial tourist quarters	no distinction
Tourism product authenticity (gastronomy, local culture & traditions)	approx. 75%

Source: Field observation

There are no artificial quarters for tourism, nor quarters deliberately dedicated to tourism. All areas serve inhabitants, workers, businesses and visitors alike, supporting the city's authenticity.

Greeters, enthusiastic association of local volunteers, who show guests to their city is a North American initiative that has been adopted by Antwerp. The association provides an alternative way to discover Antwerp with an original approach to tourism. Through direct contact with the local population, they try to promote respect for the city's environment, culture and traditions, as well as personal exchanges between visitors and inhabitants. This is also the case with local certified guides in the city.

Local guilds representing folklore and local traditions have long been well organized in Antwerp. They organize events, many accessible to visitors.

#### C.6 Density

**Table C.6 Performance criteria density** 

Criteria	Data
Number of tourists per 100 residents	207
Number of same-day visitors per 100 residents	2,319

Source: Calculations based on several tables in Stad Antwerpen, Stad in cijfers: databank available at: https://stadincijfers.antwerpen.be/databank/

#### C.7 Public green spaces

Table C.7 Performance criteria for public green spaces

Criteria	Data
Number of parks	not available
% of green space represented by public parks	10%
% of preserved areas/reservoirs/waterways/parks in relation to total land area	5%
number of trees in the city in relation to city area and/or population size	not available
% of green space (public parks) coverage in relation to city area	27% of municipality;
Green space per inhabitant	108 m <sup>2</sup>
% of green or public spaces in need of improvement	not available

Source: Stad Antwerpen (2013), Groenplan analyse deel 3 milieu

Figures shown above are for the Municipality of Antwerp. For District Antwerp, an average 39% of the total area is green space (varying by city quarter from 14% to 51%). Antwerp is one of Europe's greenest cities. 69% of the population lives within 400m of a green public space; access to 28% of the total green space is free; 10% of green space consists of public parks.

#### C.8 Water quality/Availability

Table C.8 Performance criteria for water quality and availability

Criteria	Data
Total amount of water availability, 2016 a	1,649 million kl. per annum
Proportion of population with access to adequate and safe drinking water	100%
Water consumption per tourist night compared to general population water consumption per resident night	not available
% of tourism enterprises taking actions to reduce water consumption	not available
% of tourism enterprises using recycled water <sup>b</sup>	some

Sources: a BASF Antwerp NV (2017), BASF in Antwerp Report 2016

There is good quality drinking water all over Belgium and Antwerp. Free drinking water fountains are available in the city centre.

In the Green Key label for accommodations, reduction of water usage is one of the criteria.

#### C.9 Air quality

Table C.9 Performance criteria for air quality

Criteria	Data
Levels of particulate matter (PM10 – mg/m3), 2017	11-20
Levels of particulate matter (PM2.5 – mg/m3)	not available
Number of days per year on which alarm levels are exceeded and traffic circulation is stopped	0

Source: Vlaamse Milieu Maatschappij, fijnstof - actuele waarden en overschrijdingen available at: www.vmm.be/data/fijn-stof/fijn-stof

<sup>&</sup>lt;sup>b</sup> Brocatus, D., chairman hotel and restaurant federation of Flanders (Horeca Vlaanderen), chapter of Antwerp, conversation with the author (22-04-2017)

The air quality is in general good. There are emission restrictions for industry and a low emission zone for motorized traffic in the city centre was introduced in 2017.

#### C.10 Waste, recycling and sewage treatment

Table C.10 Performance criteria waste/reuse/recycle/sewage treatment

Criteria	Data
Volume of solid waste generated <sup>a</sup>	138 kg per capita
Recycling rate (% of solid waste diverted from waste stream) <sup>a</sup>	67%
Waste production per tourist night compared to waste production per person in the general population (kg)	not available
% of tourism enterprises separating different types of waste <sup>b</sup>	All
% of total waste recycled per tourist compared to total waste recycled per resident per year	100%
% of sewage in Antwerp treated to at least secondary level prior to discharge	not available

Sources: <sup>a</sup> Calculation based on OVAM (2017), *activiteitenoverzicht 2016*, available at: www.ovam.be/sites/default/files/atoms/files/OVAM\_activiteitenoverzicht\_2016\_LR\_spreads.pdf and combined with federal state figures;

Waste production per capita in Belgium is 420 kg. In Flanders 282 kg is recycled, and 138 kg per capita remains waste, giving an estimated recycling rate of 67%. With stricter federal and municipal rules and the implementation of new techniques, final waste production per capita is going down each year.

#### C.11 Landscape and biodiversity protection

Table C.11 Performance criteria for landscape and biodiversity protection

Criteria	Data
% of local enterprises in the tourism sector actively supporting protection,	not available
conservation and management of local biodiversity and landscapes	

#### **C.12 Internet connectedness**

Table C.12 Performance criteria for Internet connectedness

Criteria	Data
Number of internet connections per 100,000 population, 2015	91,800
% of Internet-connected households, 2015	91.8%
% of residents with smartphone access, 2015	68.4%
% of commercial and residential users with internet download speeds of at least 2 Mbit/s	100%
% of commercial and residential users with internet download speeds of at least 1 gigabit/s	not available

Source: Stad Antwerpen (2016), Jaarrapport Antwerpse monitor, Stad Antwerpen 2015

<sup>&</sup>lt;sup>b</sup> Brocatus, D., chairman hotel and restaurant federation of Flanders (Horeca Vlaanderen), chapter of Antwerp, conversation with the author (22-04-2017)

#### C.13 Government services

Table C.13 Performance criteria for government services

Criteria	Data
% of government services that can be accesses by citizens via web or mobile phone	70%
Existence of electronic benefit payments (e.g. social security) to citizens	<b>√</b>

Source: Estimate (164 services are now available via the municipal e-desk).

### C.14 Public transport

Table C.14 Performance criteria for public transport

Criteria	Data
% of traffic lights connected to real-time traffic management system	not available
Public transit services (bus, regional train, metro, rapid transit system) offer real time information to the public	<b>✓</b>
Availability of mobile app for public transport (e.g. purchase tickets, schedule and map of all public transport services)	<b>√</b>

Source: Field research

#### List of figures Figure 1.1 Location of Flanders 2 Figure 1.2 Town hall and guildhouses 5 7 Figure 2.1 Strategic hospitality centres Figure 2.2 Tourist information office in the central station 8 Figure 2.3 Apps – 'This is Antwerp' and 'Atypical Antwerp' 9 Figure 2.4 Information panel 10 Figure 3.1 Visitors' motivation for travel to Antwerp, 2011 13 Figure 3.2 Activities during visitors' stay in the Flemish Cities of Art 14 Figure 4.1 Overnights by source market, 2015 15 Figure 4.2 Arrivals by source market, 2015 16 Figure 4.3 Quarterly breakdown of same-day visitors, 2016 16 Figure 4.4 The newly opened conference centre 17 Figure 4.5 Trend in number of bednights in hotels from 2011 to 2015 18 Figure 4.6 Overnight stays in hotels by month, 2015 18 Figure 4.7 Overnight stays by type of accommodation, 2015 19 Figure 4.8 Trend in cruiser arrivals in Antwerp, 2008–2016 20 Figure 5.1 Development of Eilandje with the MAS Museum 23 Figure 5.2 New Port Authority building 24 Figure 5.3 Folklore events in the city 25 Figure 5.4 The brand logo of Antwerp since 2005 26 Figure 6.1 Bicycle rental for inhabitants and visitors 29 Figure 7.1 Dashboard for tourism 33 Figure A1: Map of Antwerp's city centre 35 Figure B.1: Organogram of Antwerp Department of Business Development and City Marketing 36 List of tables Table 1.1 Travelling times between Antwerp and selected points 3 Table 1.2 Tourism enterprises 4 Table 2.1 Performance criteria for destination growth strategy 5 Table 2.2 Performance criteria for visitor satisfaction 5 Table 4.1 Performance criteria for tourism flows 15 Table 4.2 Trend in hotel room occupancy, 2008–2016 19 Table 4.3 Cruise arrivals in Antwerp, 2016 20 Table 4.4 Performance criteria regarding the economic impact of tourism 21 Table 4.5 Belgium's Gross Domestic Product, 2015 21 Table 4.6 GDP per capita at purchasing power parities, 2013 22 Table 5.1 Performance criteria for Antwerp's attractions 22 Table 5.2 Performance criteria for events 25 Table 5.3 Performance criteria for community attitudes 26 Table 6.1 Performance criteria for sustainable tourism policies and strategies 27 Table 6.2 Performance criteria for greenhouse gases and energy efficiency 27

Table 6.3 Performance criteria with regard to mobility	29
Table 7.1 Performance criteria with regard to the sharing economy	30
Table 7.2 Performance criteria regarding Antwerp's status as a smart city	31
Table 7.3 Performance criteria with regards to open data	32
Table C.1 Performance criteria for community engagement	37
Table C.2 Performance criteria for gender equality	37
Table C.3 Performance criteria for social inclusion	37
Table C.4 Performance criteria for safety & security	38
Table C.5 Performance criteria for authenticity	38
Table C.6 Performance criteria density	38
Table C.7 Performance criteria for public green spaces	39
Table C.8 Performance criteria for water quality and availability	39
Table C.9 Performance criteria for air quality	39
Table C.10 Performance criteria waste/reuse/recycle/sewage treatment	40
Table C.11 Performance criteria for landscape and biodiversity protection	40
Table C.12 Performance criteria for internet connectedness	40
Table C.13 Performance criteria for government services	40
Table C.14 Performance criteria for public transport	41

# **Bibliography**

Antwerpen wordt eerste smart city: stad gaat overal sensoren verstoppen, 2017, available at: www.nieuwsblad.be/cnt/dmf20170105\_02658649 (28-07-2017)

BASF Antwerp NV (2017), BASF in Antwerp Report 2016

Braun, E (2008), City Marketing, towards an integrated approach, ERIM PhD Series,

Cambio Autodelen, available at:

www.cambio.be/cms/carsharing/en/2/cms?cms\_knuuid=383ac52d-6f2d-4bcf-a2ec-6db0ff9defc5&cms\_f4=1&cms\_f8 (28-07-2017)

De Lijn (2017), *Toegankelijkheid*, available at:

//www.delijn.be/nl/overdelijn/organisatie/zorgzaam-ondernemen/toegankelijkheid (28-07-2017)

European Commission (2016), Quality of life in European Cites 2015

Eurostat, (2013), *National accounts and GDP*, available at: ec.europa.eu/eurostat/statistics-explained/index.php/National\_accounts\_and\_GDP (28-07-2017)

Eurostat, *Eurostat News release* 39/2016, 26-2-2016, available at: ec.europa.eu/eurostat/documents/2995521/7192292/1-26022016-AP-EN.pdf/602b34e8-abba-439e-b555-4c3cb1dbbe6e (10-08-2017)

Fans of Flanders available at: www.youtube.com/channel/UCDcG58e09lP6YQQR8hwa1nA (28-07-2017)

FPS Economy, Directorate-general Statistics, *Overnachtingen in 2015 per regio en type van accommodatie* available at:

statbel.fgov.be/nl/modules/publications/statistiques/arbeidsmarkt\_levensomstandigh eden/toerisme\_per\_land\_van\_herkomst\_en\_per\_type\_accomodatie\_2014.jsp (28-07-2017)

Flanders meeting and Convention Centre, available at: www.elisabethcenter.be/en/meetings-events-antwerp/ (28-07-2017)

Gewest Vlaanderen (2016), Inventaris hernieuwbare energie in Vlaanderen 2015

Guidea and Toerismevlaanderen (2010), Tevredenheid bij bezoekers van infokantoren

Guido de Vliegher, *Fietsreizen in Vlaanderen* available at: www.guidodevliegher.be/fiets\_vlaanderen.htm (10-08-2017)

Green Key available at: www.greenkey.global/ (28-07-2017)

Hofstraeten van, D. (2014), *Meting van de Antwerpse horecakernen 2013*, Stad Antwerpen, Antwerpen

Holthof, C. and Tilburg van, S. (2016), Hotel rapport 2015, Toerismevlaanderen, Brussel

International Congress and Convention Association (2016), *ICCA Statistics Report* 2015, *The International Association Meetings Market* 2015, available at: https://www.iccaworld.org/dcps/doc.cfm?docid=1951 (28-07-2017)

Koema World Atlas, *GDP Belgium*, available at: https://knoema.com/atlas/Belgium (28-07-017)

Maesschalck de, P. and Weekers, K., Studiedienst Vlaamse Regering,(2014) *TSA* (Tourism Satellite Account) Flemish Region and Brussels-Capital Region 2014 Executive Summary

Martens, F., marketing- en communicatiemanager Cultuur Stad Antwerpen, conversation with the author (19-04-2017)

OVAM (2017), activiteitenoverzicht 2016, available at: www.ovam.be/sites/default/files/atoms/files/OVAM\_activiteitenoverzicht\_2016\_LR\_s preads.pdf

OVG Antwerpen (2001), *Analyse personenvragenlijst*, Provinciale Hogeschool Limburg, Diepenbeek

Port of Antwerp, *Greenhouse Gas Emissions*, available at: www.sustainableportofantwerp.com/en/content/energy-and-climate/greenhouse-gasemissions (28-07-2017)

Stad Antwerpen, *aantal binnenlandse/buitenlandse dagtoeristen*, Stad In cijfers: databank available at: https://stadincijfers.antwerpen.be/databank/ (28-07-2017)

Stad Antwerpen, *aantal overnachtingen Antwerpen*, Stad In cijfers: databank available at: https://stadincijfers.antwerpen.be/databank/ (10-08-2017)

Stad Antwerpen, *aantal zeecruises/riviercruises; aantal passagiers zeecruises/riviercruises*, Stad In cijfers: databank available at: https://stadincijfers.antwerpen.be/databank/ (28-07-2017)

Stad Antwerpen evolutie uit activiteiten in stad Antwerpen (2015), Stad in cijfers: databank available at: https://stadincijfers.antwerpen.be/databank/ (28-07-2017)

Stad Antwerpen, *Het Eilandje – Masterplan fase 2,* available at: www.antwerpen.be/docs/Stad/Stadsvernieuwing/BrochureEilandjeNL.pdf

Stad Antwerpen, verkeer en parkeren (2015), *Antwerpen Wereldfietsstad-fietsbeleid en actieplan* available at: www.antwerpen.be/nl/overzicht/fietser/beleid (28-07-2017)

Stad Antwerpen, *percentage bruto kamerbezettingsgraad*, Stad in cijfers: databank available at: https://stadincijfers.antwerpen.be/databank/ (28-07-2017)

Stad Antwerpen, *stad in cijfers mobiliteit, autodelen*: databank available at: //stadincijfers.antwerpen.be/databank/ (28-07-2017)

Stad Antwerpen, *stad in cijfers mobiliteit, velo*: databank available at: https://stadincijfers.antwerpen.be/databank/ (28-07-2017)

Stad Antwerpen, stad in cijfers, Rapport Economie (2015), available at: https://stadincijfers.antwerpen.be/Databank/Jive//JiveReportContents.ashx?print=tru e&workspaceGuid=2a18cd0f-b964-469a-a3b6-e6f17e5492ac (10-08-2017)

Stad Antwerpen, *Strategie Toerisme 2016-2015 eindrapport*, available at: https://issuu.com/visitantwerpen/docs/strategie\_toerisme\_2016\_2025\_eindra

Stad Antwerpen, Vlaanderen en IMEC bouwen samen aan een smart city proeftuin, ondernemen in Antwerpen 05-01-2017, available at: www.ondernemeninantwerpen.be/nieuws/stad-antwerpen-vlaanderen-en-imec-bouwen-samen-aan-een-smart-city-proeftuin

Stad Antwerpen (2017), *Lage-emissiezone Antwerpen: sinds 1 februari 2017*, available at: www.antwerpen.be/nl/info/553e39fccaa8a7fe0f8b45c6/lage-emissiezone-antwerpen-vanaf-1-februari-2017 (28-07-2017)

Stad Antwerpen (2017), Jaarrekening 2016 | Stad

Stad Antwerpen (2016), Nieuwe metingen van bezoekers en passanten bevestigen populariteit Antwerpen, 16-09-2016, available at:

www.ondernemeninantwerpen.be/nieuws/nieuwe-metingen-van-bezoekers-en-passanten-bevestigen-populariteit-antwerpen (28-07-2017)

Stad Antwerpen (2016), Jaarrapport Antwerpse monitor, Stad Antwerpen 2015

Stad Antwerpen (2013), Groenplan analyse deel 3 milieu

Stad Antwerpen (2013), Focus on Antwerp. Your prime business destination for Europe

Stad Antwerpen you tube channel, atypical antwerp – the movie

www.youtube.com/watch?v=gYcuYIKiGyU (28-07-2017)

Toerismevlaanderen (2016), Hotelrapport 2015

Toerismevlaanderen, *Toerisme in cijfers 2015 XL*, *per maand,* available at: www.toerismevlaanderen.be/toerisme-cijfers-2015-xl (28-07-2017)

Toerismevlaanderen (2017), *Te gast in Vlaanderen 2011-2015, Logiesaanbod in Vlaanderen.* 

Toerismevlaanderen (2016), Tourism in figures XL, Number of arrivals/overnights by purpose of stay 2015

Toerismevlaanderen (2014), Toerisme in cijfers 2013, rapport kunststeden

Velo Antwerpen, available at www.velo-antwerpen.be/en (28-07-2017)

Visit Antwerp You tube channel available at

www.youtube.com/user/visitantwerpen (28=07-2017)

Vlaamse Milieu Maatschappij, *fijnstof - actuele waarden en overschrijdingen* available at: www.vmm.be/data/fijn-stof/fijn-stof (28-07-2017)

WES (2012), Kunststedenonderzoek 2011

### **Interviews**

Interviews for this study have been held with the following individuals (in alphabetical order). Their input and support was greatly appreciated.

Bogaert, A., Director Business and City Marketing of Stad Antwerpen, conversation with the author (20-04-2017)

Bosman, T., manager destination development Stad Antwerpen, conversation with the author (20-04-2017, 27-07-2017 and 09-08-2017)

Brocatus, D., chairman hotel and restaurant federation of Flanders ('Horeca Vlaanderen'), chapter of Antwerp, conversation with the author (22-04-2017)

Hofstraeten van, D., Expert Detailhandel Investdesk Stad Antwerpen, conversation with the author (20-04-2017)

Peeters, F., manager detailhandel en horeca, Stad Antwerpen, conversation with the author (19-04-2017)

Roeck de, M., director Visit Antwerpen Stad Antwerpen, conversation with the author (20-04-2017)