MOBILITEIT

B R U G G E

REPORT ON 50 YEARS OF MOBILITY POLICY IN BRUGES

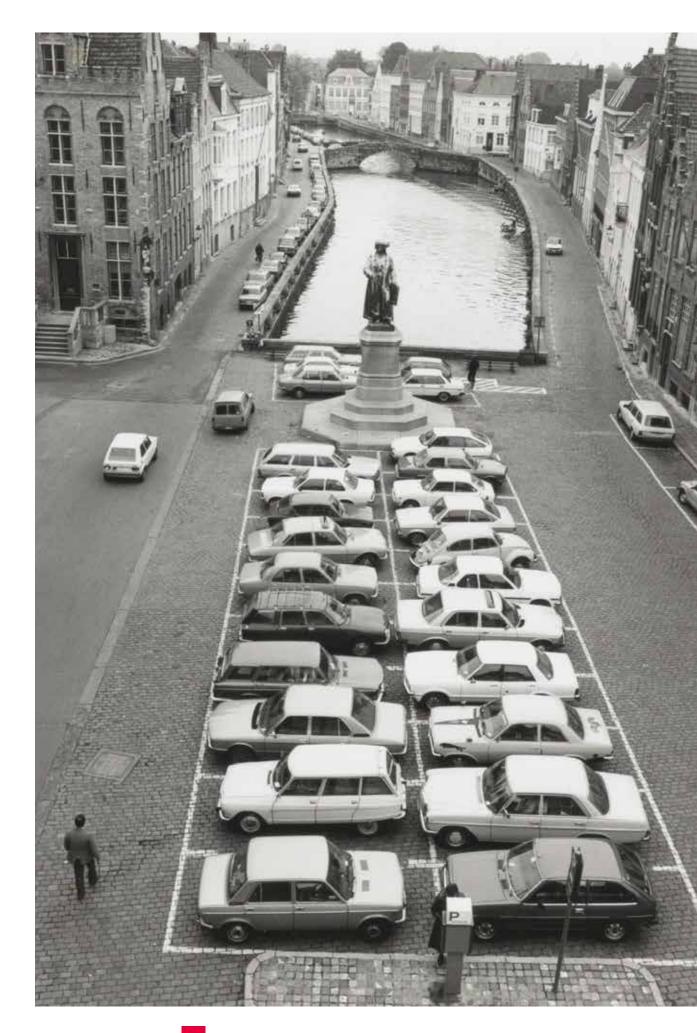


TABLE OF CONTENTS

Introduction by Burgomaster Dirk De fauw 7			
Reading guide			
Lexic		9	
	arch design: preparing for the future, learning from the past	10	
1.	Once upon a time there was Bruges	10	
2.	Once upon a time there was the (im)mobile city	12	
3.	Once upon a time there was a research question	13	
	ty-wide reflection on mobility planning	14	
1.1	Early 1970s, to make a virtue of necessity (?)	14	
1.2	The Structure Plan (1972), a milestone in both word and deed	16	
1.3	Limits to the "transitional scheme" (?) (late 1980s)	18	
1.4	Traffic Liveability Plan (1990)	19	
1.5	Action plan 'Hart van Brugge' (1992)	20	
1.6	Mobility planning (1996 – present)	21	
1.7	Interim conclusion: a shift away from the car (?)	22	
	nematic evaluation - the ABC of the Bruges mobility policy	26	
2.1	Cars	27	
2.2	Buses	29	
2.3	Circulation	34	
2.4	Heritage	37	
2.5	Bicycles	38	
2.6	Canals and bridges	43 45	
2.7 2.8	Participation / Information Organisation	45 54	
2.0 2.9	Parking	57	
2.10		62	
2.10	Spatial planning	68	
2.11		71	
2.12		75	
2.13		77	
2.15		79	
2.16		83	
2.17		86	
3 A c	ity-wide evaluation	88	
3.1	On a human scale (objective)	81	
3.2		90	
3.3	On a street scale (means)	91	
3.4	Mobility policy as a means (not an objective)	93	
3.5	Structure planning (as an instrument)	95	
3.6	Synthesis: the concept of 'city-friendly mobility'	98	
3.7	A procedural interlude: triggers for a transition	99	
Archives and collections 106			
Publications 10			
Websites 10			
Acknowledgements 108			



DEAR READER,

Books and articles about Bruges can fill entire libraries. Do we really need another publication about the history of this city? Hasn't everything been said already? This publication, however, proves the opposite, as it provides new insights into the history of mobility and traffic management in Bruges.

If I may give you a reader's suggestion : start by strawling through this publication's photos. In less than 50 years, the city withnessed a spectacular metamorphosis. From a car-oriented city to a people-friendly city . It is a story we are still writing today. Next year (2021), we will further expand our pedestrian area with the redesign of the Katelijnestraat and at the end of that year we will also implement a new bus plan. But a change in minds and streetlife happened also outside our historical city centre: 30 km/h zones were rolled out, dangerous traffic points were and are being tackled, new and safe cycle paths were and are being constructed ...

But apart from these projects, our story is especially a story of people. To me, this publication is also a personal 'trip down memory lane'. I remember with nostalgia how I stood on the barricades protesting for a liveable Sint-Michiels, including a – successful – fight against reconstructing the Koning Albert I-laan as a new expressway. How later, as alderman for public works, I was part of the story that made the Market Square a no-parking zone. And how nowadays, as Burgomaster and being responsible for mobility in our city, I face new challenges every day.

Perhaps the publication's biggest added value lies in the fact that it not only zooms in and out on the past, but that it also focuses on the present and the future. We probably don't do this enough. The risk of only being focused on daily problems is real. A clear compass is therefore not an unnecessary luxury. And as you will see, many small steps eventually make a world – or should I say a city – of difference.

With its rich tradition, also in terms of mobility planning, Bruges is proud of its past. Standing in the present, we confidentally look to the future.

I would like to end with a word of gratitude and appreciation to the author Bart Slabbinck, who has been working for our city as a mobility expert since early 2018. Anyone who reads this publication will agree that we can be proud of such an expert and committed city employee.

Dirk De fauw Burgomaster of the city of Bruges

Reading guide

DEAR READER,

The publication has a twofold starting point. In the first place, I submitted this work as a thesis in the graduate programme 'traffic engineering and mobility' at the Vives University of Applied Sciences, where I could rely on the support of supervisors Mr Koen Vandenberghe and Mr Eddy Klynen.

An action by the European Horizon 2020 Handshake project inspired this thesis. In this project, Bruges joins forces with other European cycling cities to exchange expertise on a successful cycling policy. While drawing up a State of Affairs (autumn 2018), I reflected on the roots of our policy on mobility and discovered that Bruges already had a great tradition regarding mobility planning. At the same time, it also became clear that this policy was barely documented compared to partner cities such as Copenhagen and Amsterdam. I therefore turned to Mr Jan Bonheure, founding father of the training programme and a native citizen of Bruges. He immediately agreed with the idea of making a reconstruction of Bruges' mobility policy (i.e. in a broader sense than just the cycling policy).

In this publication, I travel trhough time, starting half a century ago. This was not choosen randomly. The Structuurplan was presented in 1972. It offered a new look on the city and its traffic management. Following the Structuurplan Bruges abandonded a caroriented traffic policy. Hence, the Structuurplan proved to be the perfect starting point for the research presented in this publication:

- I will start by presenting the research design;
- in chapter 1, I will make a reconstruction (based on main points) of the Bruges mobility planning;
- in chapter 2, 1 will do the same for the various mobility topics, including the cycling policy;
- a project-based evaluation will follow in chapter 3. Here I will reflect on the concept of 'city-friendly mobility' which was the main conclusion in the State of Affairs to characterise the Bruges policy. I will also make a process-based evaluation and I will examine the triggers that initiated a new way of thinking about mobility in 1972 and later on.

Lastly, some reading advice. This work contains a lot of quotes. These may often seem anecdotal, but they were chosen carefully to illustrate the spirit of the time. A reformulation would in most cases mean a loss of this particular Zeitgeist. Again, I wanted to avoid that I (or you as the reader) fell into the trap of considering mobility or traffic as only a technical discipline. That would be incorrect. As Weber (2010) states in the publication 'De blijde intrede van de automobiel in België' (English title: The advent of the automobile in Belgium), the story of traffic (and thus of mobility planning) is a social history. A story of people : how they experienced traffic and how it changed their (and our) lives and social organisation in general.

Finally, I would like to thank everyone (within the training programme, within the European Handshake project, within the city council, within the context of this work) for an inspiring collaboration. I wish you an inspiring journey through the past, present and future of Bruges.

Plus est en vous, Bart Slabbinck

LEXICON

- Golden Triangle: the tourism district of Bruges (Beguinage/Minnewater Market square Zand square)
- Bruges egg: the egg-shaped historical city centre of Bruges
- **Reien:** the (historical) canals of Bruges, giving the centre its charme, also being called the Venice of the North
- Vesten: Bruges' green and historical city ramparts
- STOP principle: mobility principle with focus first on walking (Stappers), then cycling (Trappers), then public transport (Openbaar vervoer) and finally on private cars (Personenwagens)
- **POST principle:** mobility principle with focus first on cars (Personenwagens), then public transport (Openbaar vervoer), then pedestrians (Stappers) and finally on cyclists (Trappers)
- Basic Accessibility Decree Decreet Basisbereikbaarheid : a decree on mobility planning in Flanders, recently approved in 2019, introducing amongst others a new vision on public transport and introducting regional mobility planning

ABBREVIATIONS:

- AWV: Agentschap Wegen en Verkeer English: Roads and Traffic Agency (Flemish government)
- BEV: Beperkt Eenrichtingsverkeer English: limited one-way traffic (with contra-flow cycling)
- **BIVV:** Belgisch Instituut voor Verkeersveiligheid English: BIRS: Belgian Institute for Road Safety
- BPA: Bijzonder Plannen van Aanleg English: Special Plans of Development (a tool of urban planning)
- MOW: Departement Mobiliteit en Openbare Werken English: Flemish Department of Mobility and Public Works
- NMVB: Nationale Maatschappij Van Buurtspoorwegen English: National Vicinal Tramway Company (nowadays De Lijn)
- NMBS: Nationale Maatschappij der Belgische Spoorwegen English: National Railway Company of Belgium
- OVG: Onderzoek VerplaatsingsGedrag English: Transportation Behaviour Research



RESEARCH DESIGN: PREPARING FOR THE FUTURE, LEARNING FROM THE PAST

1. Once upon a time there was ... Bruges

Risen from water and bricks, guilds, craftsmen, merchants, nobles as well the people of Bruges made their city one of the most beautiful cities in Europe. The port and canals defined the city. The rhythm of life was a reflection of the waves in the water. Caestecker & Keppler, 1983, Brugge: straten en pleinen

One cannot write about the history of Bruges without telling a history of mobility. Like in many other European cities, transport modes left their mark on the urban fabric. This was also the case in Bruges, where prosperity prevailed from the trade across the European seas in the Middle-Ages and left a still enduring impression on the city's charm.

One cannot write about the history of mobility without writing about a history of change. Even in Bruges, once called 'Bruges la Morte' by the writer Rodenbach, time never stood completely still. In the 18th century for example, the Coupure canal was dug to accommodate larger ships.

And yet, the story of mobility remained local until then. In fact, the concept of 'mobility' didn't exist. Mobility was not a policy issue or could be restricted to freight transport until the 19th century. Mobility was a local story for most inhabitants of Bruges. On foot or by cart. Factors such as 'distance' and 'speed' did not matter. In a city neighbourhood, people lived within a 15-minute walking distance from the Market Square (hence the name "city quarter" – "stadskwartier"), where the bells of the Belfry would be ringing as a means of communication at times of important news.

The invention of the internal combustion engine changed the perception of time and space. Trains became more popular, followed by the tram a little later. In Belgium, an extensive railway system was developed where large railways branched off into smaller ones, the so-called vicinal tramways (Dutch: buurtspoorwegen). The system was a lever for goods and passenger transport. Agricultural and industrial products could be transported quickly and cheaply over longer distances. Workers could be brought quickly and cheaply to the cities and industrial centres. These new means of transport resulted for cities such as Bruges in the breaking out of their ramparts, introducing an urban sprawl (which is still happening).



But also the city itself was changing. At the Zand Square the rippling of the canals disappeared into the background by the hissing of the steam trains. The tram made its appearance in the narrow streets of Bruges. The square in front of the City Theatre became a traffic square. However, the biggest change was yet to come: cars. The streets, once a social and interactive forum, would transform into a road, a traffic area.

In the twentieth century, cars came into the picture and reached a godlike status. The cityscape had to adapt once again: the streets were widened and asphalted. A ring road was constructed in Bruges, while the squares became nothing more than parking reservoirs. So what were the consequences? Pedestrians were pushed away more and more. Life in the city became less pleasant.

Vlaams Weekblad (03/06/1982) following the book launch of "Brugge, straten en pleinen"

In the early fifties, a mobility policy was now imperative. Or preferably a transport policy, which thus far seemed to obey King Car. Even the first circulation and (anti) parking measures were not meant to discourage car traffic. On the contrary, their objective was to optimise the flow of cars. As if the streets were a hydraulic system and a plumber (i.e. traffic engineers) had to work on it. In 1965, the municipal council even gave the green light to fill in the Coupure canal "to construct a broad avenue with an access road and suitable parking facilities". Furthermore, a new bridge over the circular canal would solve the bottleneck at the historic gate Gentpoort.

So far no drastic measures were taken in Bruges to solve the growing traffic problem. [...] When the problem suddenly became more acute for citizens and motorists, it was thought that it could be solved by simply treating the symptoms: less pavements, laying peculiar concrete kerbs on the Market Square, [...] in order to keep the traffic flow going, preferably through the city centre. The seemingly simplistic questions such as "where does traffic come from?" "where is the traffic going?" were apparently never asked.

Brugge, 1974, vol. 10 issue 39

2. Once upon a time there was ... the (im)mobile city

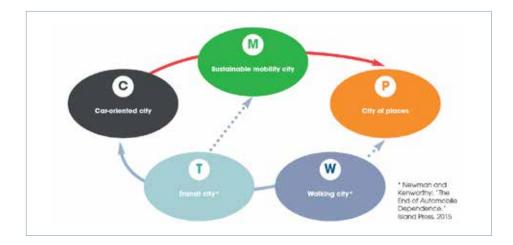
In the early 1970s, the following questions emerged: what would the city council decide? Would it follow the footsteps of many European cities? Where ring roads brought cars into the heart of the historical city centre? Where blue structures such as the Coupure were effectively transformed into parking spaces? Or was there a different solution ?

The European project CREATE learns us that the Bruges city council was not and is not the only administrative body struggling with these policy choices. From the saying 'Preparing for the Future, Learning from the Past', Prof. Jones (University College London) explored in depth the mobility policy in ten cities and found a common storyline. Cities initially developed according to the needs of pedestrians (and transport with animals). Trains and trams then transformed the 'walking city' into a 'transit city'. The research shows that the advent of the car led to the 'car-oriented city'. However, as Bruges experienced in the 1950s and 1960s, more space for cars meant a certain selffulfilling prophecy, resulting in the arrival of more cars and thus new demands for car infrastructure. Resulting in a vicious circle, strenghening the car dominion ever more.

Adding car lanes to deal with traffic congestion is like loosening your belt to cure obesity.

Lewis Mumford, 1955, The Roaring Traffic's Boom

However, the research also showed that a different path could be taken, a path towards other sustainable modes of transport ('sustainable mobility city'). Even steps towards a rehabilitation of squares and streets tailored to people ('city of places'). Although the CREATE-research makes it clear that history is never straightforward.



3. Once upon a time there was ... a research question

This research starts from the following research question: "How did the mobility policy in Bruges evolve since the 1970s?". Further questions derived from this research question: "In which phase of the CREATE framework can the Bruges' policy be situated?", "How did Bruges interpret the concept of 'city of places'?", "What story did Bruges write?", "What success factors (process-driven – do's and don'ts) can be identified?".

But that is not everything. After all, a more important question is what such a reconstruction can teach us about the present and future and – above all – how the past can inspire both the present and the future? In concrete terms, this research study therefore shifts between theory (with frameworks such as CREATE) and practice (Bruges). Between various spatial scales. Between past, present and future.

Because of the limited time and in the absence of a similar exercise in other (Flemish) cities, the research is mainly a reconstruction rather than an evaluation (e.g. via a benchmark). Nevertheless, this could have been a great added value. Let this be a motivation to repeat this research in other cities as well and to implement 'historical research' as a fully recognised research method in mobility research. Didn't Winston Churchill once say: "Those who fail to learn from history are condemned to repeat it"?



1 A CITY-WIDE REFLECTION ON MOBILITY PLANNING

This chapter will reconstruct the mobility policy. It is a story focussing on the the bigger picture, focussing on the main planning and policy processes. The next chapter then will take a more in-depth look at specific topics such as the cycling and parking policy.

1.1 Early 1970s, to make a virtue of necessity (?)

No golden sixties for Bruges or at least no golden sixties for the historical city centre. Enchanted by the ideal of the suburban home (the so-called Flemish dream), citizens turned their backs on the city and settled in the newly built neighbourhoods outside the ramparts (Vesten). Many left the city. One in eight houses was empty in the city centre. Dilapidation grew rapidly. The low degree of industrialisation gave little hope. Heritage care was therefore a minor concern in this context. The result? Monuments such as the Romaneque ruins at the Burg, the 18th-century port neighbourhood, the Smedenkapel and Hemelsdalekapel were demolished. Add to this an (imminent) traffic congestion and the Bruges' policy was inevitably in troubled water.

The night seemed darkest just before dawn. In the 1970s, the Bruges policy would find a new impetus. The following factors proved to be decisive for the development of a new (traffic) policy:

• the merger of Greater Bruges

On 1 January 1971, Bruges (which had already expanded northwards with Zeebrugge, Koolkerke and Sint-Pieters) merged with Assebroek, Dudzele, Lissewege, Sint-Andries, Sint-Kruis and Sint-Michiels and became the 5th largest city in the country. The surface quadrupled, while the population more than doubled. The merger initiated a new way of thinking regarding the city council's task.

When I [Frank Van Acker, author's note] proposed the plan for Greater Bruges, I had two major reasons: an economic one and a social one. The economic reason related to Zeebrugge. How in God's name can one build a world port with international appeal near a town of barely 50,000 inhabitants? Imagine how we would have to ensure accessibility and construct traffic arteries to the port without a Greater Bruges. [...] In addition, there was also a social reason. [...] The existing municipal boundaries were outdated and became barriers to social evolution.

Brugsch Handelsblad, 1989

a social revival, in particular with regard to heritage In 1965, the Marcus Gerards Foundation was established. The foundation denounces the loss of the historical patrimony. With success, because for the very first time Bruges appoints an alderman for urban renewal (not coincidentally the founding father of the Foundation) and a Department of Heritage Conservation and Urban Renewal. The green light was given to a Structure Plan (see below) that introduced a new way of thinking about the city, including a new traffic model.

a social revival (bis), King Car is not so absolute after all The post-war blind belief in progress also suffers from the traffic jams that hit Bruges – and especially its historical city centre. Streets became traffic axes. Squares became car parks. Pavements shrunk to a bare minimum. First (circulation and parking) measures were not very effective. New traffic insights and schemes, such as the ones Buchanan proposed (1963), show an alternative path (see below).

We are replacing our streets with roads [...] Actually, our roads do in fact represent what is going on in our society, namely:

- o Hurry, speed, covering distances
- o Creating distance
- o Negation of tranquillity, meeting people, children playing, ...
- o Housing i.e. the houses has to adapt to traffic demands
- Wonen of Wijken?, 1978, Tanghe et al

a social revival (tris), about Lastige Bruggelingen (loosely translated: stubborn citizens of Bruges) and other conscious civilians

The criticism of the Marcus Gerards Foundation did not come out of the blue. The downside of progress became clear all over the world: Unesco drew attention to historic monuments with the Venice Charter (1964), the Club of Rome (1968) sounded the alarm concering our planet, a new visions of society emerged ... Also in Bruges, where Cactus '68 was founded and where since 1974 the city newspaper 'de Lastige Bruggeling' put the local politics through the wringer and addressed Burgomaster Van Maele's conflict of interest regarding files of national road 95 (later called Expressway N31). According to the newspaper, he would have done this to favour befriended property developers. The entire CVP team which is strongly in control of this city and handles things 'the Bruges way'. An absolute majority, no form of participation, no criticism either: The Leaders know what their people need.

De Lastige Bruggeling, 1982, vol. 7, issue 9 & 10

the completion of the ring road

Until the 1960s, all main roads and gate streets led to the Market Square, still reflecting the medieval concept of the traffic system. In terms of street witdth, these streets were by no means equipped for an influx of cars. A ring road was almost complete in the late 1960s and introduced a new traffic system. A system that could conduct traffic along the historic centre. But there was more. With the imminent completion of ring road R30, the city council would now also be responsible for the national roads in the city centre. This included a transfer 'in good condition' from the national to the local government ... which meant a reconstruction before transfer. In addition to the construction of a sewerage and the remediation of the canals, it became clear that the majority of the streets in the Bruges city centre needed quite a bit of work.

Without this completion, no serious road work could be carried out in the city centre. People who wanted to go from St.Kruis or Assebroek to St.Michiels, St.Andries or further, and vice versa, had no choice but to go through the city centre. As long as this mortgage wasn't completely settled, serious work had to wait.

(former) municipal councillor Van Den Abeele, 1977, statement in the city council

In short, a window of opportunity presented itself in the early 1970s. The achievement of this golden opportunity can be attributed to a coalition of proverbial muscles & brains. The political power of alderman Van den Abeele, supported by, among others, chief police commissioner De Bree combined with the vision of experts such as professor Lemaire of the University of Leuven (co-founder of the International Council of Monuments and Sites) and architect Jan Tanghe (who would become a purveyor to the Bruges mobility policy with Group Planning, a major planning office founded in 1966). Together they set out a vision (Structurplan, 1972) which would have an impact till today.

1.2 The Structure Plan (1972), a milestone in word and deed

The Structure Plan (1972) introduced a new vision regarding the historical city centre. The plan is based on three objectives. Firstly, the residential function in the city centre should be optimally developed. Secondly, the character of the city centre needs to be improved significantly. Thirdly, the traffic must adapt to the city and not the city to the traffic.

The structure plan was the first impetus to study traffic in the historical city, the coherence between traffic, urban space and activities and to develop models or rather an assessment framework to which the traffic planning for the Bruges city centre must comply.

Keppler, 1987, Verkeersplanning voor de Brugse Binnenstad

The Structure Plan also introduced a traffic model for Bruges. Inspiration was drawn from the famous Buchanan report 'Traffic in Towns' (1963). The car becomes a means again and not an objective. The ultimate goal is a liveable city. The Scottish city planner Colin Buchanan argues that traffic policies should include the separation of through-traffic and local traffic as an objective. This call for a road hierarchy which translated to historic cities like Norfolk or Bruges is best served by the creating of a central traffic barrier that stops through-traffic. Hence the idea of a loop system.

The motor vehicle is here to stay ... [it] will demand an almost heroic act of self-discipline from the public. It is not only road safety that is involved, but everything to do with sane and civilized use of motor vehicles.

Buchanan, 1963, Traffic in Towns

The study confronts the city council also with the surreal parking desirements if the policy would remain unchanged ('saturation scheme'). The then expected increase in the number of cars would result in a demand for approximately 24,000 parking spaces, which equals a surface area of 60 hectares. And this while the Bruges egg (the egg-shaped city centre of Bruges) is 'only' 370 hectares. The Structure Plan therefore initiates the idea of a centrifugal parking policy with various parking zones ('optimal scheme'). Furthermore, there is also a call for underground parking spaces, something that is obvious today but was revolutionary back then.

Precisely for this reason, a "saturation scheme" was purposely developed to clearly demonstrate the consequences of increasingly busy traffic. This approach clearly shows that such harsh procedures [to construct parking facilities etc., author's note] undermine the city's morphology. [...] In the long term, only an optimal scheme with clear traffic restrictions will offer a solution. Structure Plan, 1972

However, practical objections stand between dream and reality. It would soon turn out to be too early for the 'optimal scheme'. The Structure Plan therefore introduces a third traffic model: the 'transitional scheme'.

Solving the traffic problem in the Bruges city centre while respecting its structure can only be done by limiting the access of vehicles to the city. [...] There is no definitive solution for city centre traffic. A flexible solution is required. Some general principles have been established, such as creating traffic barriers in the city centre, closing the inner ring road as a matter of urgency, implementing the centrifugal loop and parking system pragmatically and developing good public transport. Structure Plan, 1972

To the city council this call for a pragmatic approach did not fall on cold stones. Even with a new City Council in 1978, with Burgomaster Frank Van Acker coming into office, the ideas of the Structure Plan would be put into practice. Step by step, the policy evolved towards a low-traffic city centre:

- a circulation plan covering the centre (1978)
 Since the 1950s, circulation measures have spread over the historical city centre like a wildfire. While the first circulation loop (1951) was only aimed at buses driving between the Zand and Market Square, restrictions were already placed on all motorised transport in the 1950s and 1960s. There was no overall vision, even though new circulation measures followed each other rapidly each year. Initially, the focus was only on the Zand Market Square axis, but the side streets soon followed. Then the gate streets and later their side streets were targeted.
- Inspired by Buchanan's vision and illustrative elaborated by the historical city of Norfolk, the Structure Plan introduced the idea of a traffic barrier: a pedestrian area in the heart of the city centre. An idea that came too soon, as was assessed in the 1978 circulation plan. The plan introduced four circulation loops in combination with a central loop around the Market Square and Municipal Theatre. Almost everywhere in the city centre, one-way traffic became the rule, including for cyclists.

The aim of the [...] traffic plan is to improve traffic management in the city centre. The new traffic situation will provide opportunities to pursue a responsible traffic policy in the future. It will not only be possible to create shopping and pedestrian streets, but also streets with low traffic volumes and residential areas. Where possible, the improvement or construction of pavements will start immediately in order to provide space and safety again to which pedestrians, whether resident or tourist, are entitled.

brochure Verkeersplan, 1978

redesign of squares and streets

The interrelationship between city and traffic, argued in the Structure Plan, is most strongly expressed in the vision on the streets of Bruges. Reduced to a traffic area in asphalt at the time, the street is redesigned as the floor of the city. The plan takes "once again the walking distances of pedestrians into consideration, defines the pavements in front of shops and demarcates the transition zone to trees and greenery". The idea of streets as a traffic area is replaced by the idea of streets as part of the cityscape. Asphalt makes way for cobblestones. Squares such as the Burg and Simon Stevin Square are rapidly restored to their former glory. A pedestrian area is initiatied. Cars are considered guests in 'woonerven' and – although not legally established – 'winkelerven' such as the Smedenstraat. Put in other words: how the redesign of streets and squares not only introduces a new philosophy of mobility, but also restores the character of the historical city centre. It must be noted that this does not happen without any problems. When the Sint-Amandsstraat was made the first car-free street to welcome pedestrians, a trader decided to throw tomatoes at the police and politicans. Although this kind of protest was rather an exception.

• expansion of car parks in the city centre

Until the 1960s, parking measures could still be described as circulation measures (to prevent parked cars from creating a bottleneck). But in the 1980s, a real parking policy was developed. The myth of free and unlimited parking faded step by step. First by expanding the blue zone (already introduced in 1966), later by introducing paid parking (1978). First, the focus was on the zone between the Zand and Market Square, but in the 1980s that zone soon expanded.

According to the 'transitional scheme', the first parking zone was given the necessary priority in the 1980s as car parks in the city centre such as Biekorf and Zilverpand were constructed. The construction of a tunnel under the Zand for the ringroad R30 offered the opportunity to create a large underground car park. However, the outer centrifugal parking zones in or even outside the borroughs have not yet been implemented. The result? The city centre gradually became a lowtraffic area. Bruges became a reference for a futureoriented urban policy, whilst respecting its past.

And outside the city centre? That is where the famous 'brick in the stomach' (i.e. the urge to build) of the Flemish people leaves its mark. The edge of the city rapidly transformed into built-up areas. New alotments expanded the city. The policy, thanks to the regional plan ('gewestplan'), can rather be described as a laissezfaire, which in practice meant that the primacy and even the tiranny of the car retains and even so was strengthened. The Structure Plan also does not mention the borroughs, apart from a – not very innovative – reflection on an urban-regional perspective. On the contrary, the vision from the regional plans is even confirmed. From a traffic planning perspective, the Structure Plan – once again inspired by Buchanan's argument to separate through-traffic and local traffic but this time at a higher scale level – endorses a multiple ring structure.

As broad and strong the consensus was for a new traffic model for the city centre, as divided would be the opinions on this vision for the outer areas. The plans to extend the E5 (E40) motorway at Jabbeke were contested from the start. An unprecedented coalition of environmentalists and farmers would ensure that works would commence for what would later turn out to be so-called "ghost bridges", i.e. bridges that were built but never used. It also marks the beginning of a dispute over national road 95 (nowadays N31), which cuts the borroughs of Sint-Michiels and Sint-Andries in half. Soon this national road would be labelled as a 'death trap' when the first fatality occurs just twenty minutes after the opening in 1975.



1.3 Limits to the "transitional scheme" (?) (late 1980s)

Although Bruges was internationally seen as highly successful for its new dynamism to the city centre, criticism was growing in the 1980s. Both within the historical city centre and in the Bruges borroughs.

At the end of the 1980s, the momentum of the urban renewal policy in the city centre seemed to fade. The head of the Department of Heritage Conservation and Urban Renewal even mentions 'the mid-life crisis of a structure plan' on the World Town Planning Day (1986). The Marcus Gerards Foundation initiates the campaign 'SOS voor een leefbaar Brugge' which denounces the arrival of large-scale hotels in the city centre. The traffic model also seems to hit its limits. The 'transitional scheme', leading to the circulation plan (1978) and the first underground car parks, can no longer cope with the (predicted) growth in car traffic. The call for further restrictions of traffic volume is gaining in strength.

Stinking hot dog city Tuesday the 19th of August was a catastrophic day. The city was blocked for incoming and outgoing traffic, and there were not enough tow trucks to tow all the obstructing vehicles. It's the 8th time this has happened this season. [...] A situation like the one we experienced on Tuesday is a total disaster: the emergency services can no longer reach the site. [...] There is nothing appealing about that! Certain tourism industries feel it is their task to sell the city. But what are we selling exactly? Stench, dissatisfaction and no space ... Brugsch Handelsblad, 22 August 1986

Criticism is also growing in the city centre. A policy for the other modes of transport is needed. Between 1975 and 1990, the number of public transport passengers decreased by 45% (city-wide figures). The Structure Plan's call for an innovative public transport model remained a dead letter, apart from a failed experiment with city buses. In order to increase the liveability of the inner city, the intercity buses were successfully excluded from the city centre in the 1980s.

Also cyclists stood on the barricades. Burgomaster Van Acker, a convinced pedestrian without a driving licence, received the nickname Frank Kalseide (English: Frank Cobblestone) because of his resolute choice to use cobblestones. Cyclists also had to comply with the circulation plan. There was no such thing as a comfortable and direct cycle path network. Inspired by, among others, the news magazine 'De Groene Amsterdammer', the Bruges cycling movement awakes in the 1980s. Under the motto 'Bruges bicycle city' (Dutch: Brugge fietsstad), the movement advocates for the elaboration of a cycling policy by playful actions such as 'rattling tours'. The local police initially plays the ball back into the movement's court and asks cyclists – from a classic view on road safety education – to adjust to a new mentality first. It just fuelled cyclist protests such as at the 'Fietselingen' event where up to 2,000 cyclists showed up to make a stand.

One-way traffic does not provide a solution. These roads become more dangerous because they make people drive faster and they are used more frequently. The one-way traffic sign is the most hated traffic sign for cyclists, since they have to make many detours because of it. De Lastige Bruggeling, 1979, vol. 6, issue 3

Last but not least, the borroughs are beginning to stir. Here, too, the downside of increasing car use becomes clear and protests increase against a strong car-oriented vision on access roads. Traffic liveability becomes a hot topic in all borroughs. In a 1988 manifesto, the political party CVP calculated that from 1977 to 1986 approximately 431 million Belgian francs were spent on interventions in the city centre, while the 'much larger edge of the city' had only 338 million Belgian francs.

Since the measures for a liveable city centre, it is high time to develop a liveability programme for the residential areas in the borroughs as well. After all, they have to deal with the negative consequences of car traffic to the same extent. The access roads in particular are unsafe and unliveable. And above all: don't turn the Koning Albertlaan into a second Baron Ruzettelaan!

Brugse Belangroep voor Fietsers, 1984

At the end of the 1980s, the Bruges city council can no longer ignore the criticism. Once again, the city calls upon the expertise of Group Planning and the local police. The result? A new traffic plan for the city centre and a traffic liveability plan for the borroughs.

1.4 Traffic Liveability Plan (1990)

Until the end of the 1980s, King Car reigned in the borroughs. Other modes of transport were second choice. At best, cyclists only had a painted bicycle path on an over-dimensioned access road. A cycling infrastructure is only provided where cyclists are not in spatial competition with cars. Bicycle paths are constructed on the ramparts and over the Kerkebeek. For the national roads, the Bridges and Roads Administration pulls the strings via a strong top-down approach. Officials only familiar with road design for cars draw up the plans to widen access roads such as the Koning Albert-laan and the national road 95.

The Bruges city council and the inhabitants begin to stir more and more in the 1990s. In study and action groups (SAK), among others, residents and politicians across party boundaries make new plans together. However, an overall vision is still lacking. Such a guide plan, making the change (cf. CREATE framework) from a 'car-oriented' policy to 'sustainable urban mobility planning', emerged in 1990 as the traffic liveability plan, a mobility plan avant la lettre.

Nevertheless, since this period [1978, author's note], there have been a number of new traffic developments that have put too much pressure on the quality of life of the immediate suburbs of Bruges' city centre:

- The increasing traffic intensities on the access and exit roads
- The loss of traffic liveability along these roads and streets
- The increasing subjective feeling of insecurity
- The capacity problems and traffic congestion on the inner city ring road, on the access roads to the ring road and on the gate streets in the city centre
- Using the remaining traffic capacity on the connecting roads and residential streets in Bruges' periphery
- [...]

This is done by drawing up a global traffic liveability plan for Greater Bruges with the following objectives:

- Improving the necessary quality of life and environment for the residents along the aforementioned roads and streets
- Improving road safety and traffic circulation
- Optimising the business environment and commercial activities in the borroughs.
 Study contract for the Traffic Liveability Plan, date not known

Analogue to the Structure Plan, Group Planning elaborates a traffic model that can be used as a basis. Because of the lack of a supra-local initiative (which would only follow in 1997), the model introduces a vision of the Bruges road hierarchy. For example, the Bevrijdingslaan is chosen to be the main access road to Bruges instead of the Koning Albert I-laan. A new vision regarding the Expressway, as an urban collector road, arises. The plan also sends a strong signal to the higher authorities. On brick roads, 2 x 2 or 3 x 1 profiles (with a central lane as an overtaking lane) are no longer used, but instead there is a 2 x 1 profile which, most importantly, separates bicycle paths and car parks with beds. Put differently : how the policy, 20 years after the Structure Plan for the city centre, now puts a stop to the dictatorship of asphalt and concrete in the borroughs also – although in a cautious and less drastic way.

It is also a moment of self-reflection. After all, anyone who selects collector and access roads also selects the residential areas. On the municipal roads, the traffic liveability plan consolidates safety. The idea is that a good design can reduce the speed, at that time still legally limited to 60 km/h. Furthermore, the philosophy intends to encourage drivers to use the supralocal road network as long as possible. Narrowed lane widths, roundabouts, road narrowing, speed bumps ... became standard in the early 1990s when 45 streets and intersections in the sub-municipalities were rapidly redesigned.

In the smallest and last volume of the traffic liveability plan, pedestrians and cyclists are discussed in more detail as well. A bicycle model sets course to an ambitious cycle path network for the entire municipality. Buses are not mentioned in the plan as it is linked to the city centre planning.

1.5 Action plan 'Hart van Brugge' (1992)

Also in the city centre, the city council does not remain indifferent to criticism. The publication 'De inzet voor een leefbaar en levend Brugge' (1990) provides an answer to the SOS campaign. This selfproclaimed White Paper not only enumerates the many achievements but also focuses on the vision of the inner city. In order to safeguard the quality of life in the city centre, the council is committed to bundling the tourist and recreational attractions together into the so-called Golden Triangle between Market Square – Beguinage – Zand Square. However, a stop on building new hotels in the city centre would have to wait until 1996, following the appointment of Burgomaster Patrick Moenaert (1995).

The White Paper promises an modified traffic plan that uses Bruges as the pilot city in a new vision for public transport. Chief police commissioner De Bree explained the vision 60 times in a comprehensive information session. On 29 March 1992, the time has finally come: the action plan "Hart van Brugge – een gezond verkeer in een gezonde stad" comes into force.

The proposed plan aims at a global approach to tackle traffic problems in the inner city of Bruges and should be assessed as such. Thus, it does not simply concern the driving directions for car traffic. Equally important are the issues with bridges, the



promotion of public transport, increased mobility for cyclists, circulation on the ring road, 30 km/h zones, parking problems and options to solve them, tourist coaches and heavy traffic. It is precisely in this coherent global approach that this plan distinguishes itself from other proposals that only propose a remedy for one certain aspect. Burgomaster Van Acker in the foreword of the "Voorstel van nieuw verkeerscirculatieplan", 1992

The highlight is the new circulation plan that puts a resolute stop to through-traffic. The circulation loops – based on the gate streets – remain as they are but the central Market Square loop would disappear. However, it would take until 1997 before the Market Square had no longer a parking function and truly became car-free.

One must be an idiot to drive through Bruges by car: that might be the new plan's baseline. Vlaams Weekblad, 24/01/1992

A second highlight is the pilot project launched by the Flemish transport company De Lijn for a new public transport model with bus services for the city centre and edge of the city with a frequency of every 10 or 20 minutes. The buses drive around the city in the shape of a star, with all of the city centre buses stopping at the train station, the Zand Square and the Market Square. New or extended routes provide better services to new districts in the borroughs, covering more than 1 million extra bus kilometres all together. The icing on the cake are new, very manoeuvrable and environmentally friendly buses that appear in the cityscape.

But there is more:

- The city centre becomes one coherent 30 km/h zone. Although this instrument has just been printed in the Belgian Official Journal ('Belgisch Staatsblad') and the design principles are still very strict. Research by the Belgian Institute for Road Safety (BIVV, now the Vias Institute) shows that the finely-woven medieval street pattern naturally acts as a 30 km/h zone.
- Limited one-way traffic is implemented in 50 streets. That way, cyclists get a more direct cycle route. However – due to very strict requirements that the higher authorities already apply – it would take until 2004 before limited one-way traffic in the city centre became the rule.
- Coaches are prohibited to drop off or pick up tourists in the city centre as an alternative a new parking area near the Minnewater is developed. An exception is made for coaches with a specific hotel destination.
- A new traffic light control system is implemented on the ring road. In combination with research into the introduction of curfews for shipping on the circular canal, the objective is to optimise the traffic flow.
- In regards to parking: more paid parking periods with a maximum parking duration (on-street) of 2 hours (instead of 3 hours), 'fiscalisation' of paid parking monitoring (1994), expanding the parking area at the Zand Square and building a car park at the train station.
- A parking ban is introduced in the city centre for lorries over 3.5 tonnes.

The results soon follow:

If we remained indecisive, then we might have faced insurmountable problems in the future. Because of the massive car traffic, the city would have simply become congested, making itself inaccessible and unliveable. The damage to living, working and shopping would have been immense. [...] A city – and certainly a city like Bruges – should not adapt to traffic, but the other way round. There is no other option. [...] It is no exaggeration to say that the measures of the traffic circulation plan have fully lived up to the expectations when it comes to traffic. How else can one interpret the fact that there are 10% less cars, 20% more cyclists, 33% more bus passengers and 25% less accidents?! Evaluation report 1993

1.6 Mobility planning (1996 – present)

The pioneering role Bruges played in terms of mobility policies was not steered by a department of Mobility. It would take until 1996 before Bruges signed the mobility covenant with the Flemish government. The city council approved the guidelines of the mobility plan in 2001 after analysing the bottlenecks, including the high parking pressure in the city centre, the need to expand the 30 km/h zone and the need for more bus services. Subsequently, in 2003, a mobility public service was set up to be the driving force of an ambitious consultation. In 2004, the new Mobility Plan comes into force, supported by for example the public awareness campaign 'Brugge Ademt'. Also a 'mobility shop' is opened and 66,000 brochures are distributed.

The Mobility Plan builds on the path that others have taken before. This time the focus is on the edge of the city of Bruges rather than the city centre, with the parking policy being taken to a next level. Analogous to the Structure Plan, scenarios are carefully considered and ultimately, the final choice is the "integrated public transport scenario, plus P+R option". In line with the centrifugal parking policy, the green light is obtained for car parks on the edge of the city (Park&Walk – on the edge of the city centre) and Park&Ride car parks (at a greater distance, served by public transport). Their aim is



to keep people who want to park long-term out of the city centre. These new emphases offer the opportunity to create an extensive paid parking zone in the city centre in combination with a blue zone (4 hours). Residents received a resident's parking permit.

The Mobility Plan's angle of approach takes the STOP principle into account. Not only topics on parking were discussed. For example, the plan also has the ambition to gradually introduce 30 km/h zones in the borroughs, in the so-called residential areas. Furthermore, an accelerated development of the cycling path network should enable Bruges to profile itself even more as the ultimate bicycle-friendly city. Special attention was paid to the target group of schools via the Action Plan 'Veilige Schoolomgeving'. The plan include screening school environments, drawing up school transport plans, awarding grants for road safety projects and speeding up the introduction of a 30 km/h zone in all school environments by 2005 (stipulated by the Decree).

An evaluation of the Mobility Plan followed in 2007. The evaluation follows track 3, which implies confirming and updating the plan. An update is needed because of the approved Municipal Spatial Structure Plan for Bruges (2006), which formalised the road hierarchy. This road hierarchy is a confirmation of the Traffic Liveability Plan, in which, for example, the Bevrijdingslaan is declared to be the main access road to the centre. The plan is also updated because of the integration of the functional cycle path network at supra-local level. Commitments, such as speeding up the development of the urban cycle path network, are confirmed and reinforced. The new Mobility Plan (2008) introduces new emphases: even more paid parking spaces, identifying weaknesses in the cycling infrastructure (particularly at the station area near Sint-Michiels – the Boeveriepoort), more attention to bicycle parking, the prospect of a Bicycle Master Plan for the port ... 'Urban logistics' also comes into the picture with the commitment to study the possible introduction of length or tonnage limits in the city centre and study the feasibility of a distribution centre.

A new evaluation of the Mobility Plan followed in 2011. There are barely new emphases. Actions confirm the Mobility Plan and provide an answer to local bottlenecks, especially parking problems. Expanding the blue zone to the edge of the city should prevent the parking pressure from spreading to the borroughs. The city also checks if it is possible to outsource parking control.

A more thorough evaluation happened in 2012 when a new committee is appointed under Burgomaster Renaat Landuyt. The citizens of Bruges can share their ideas via an ambitious participation project. The central principle of the new Mobility Plan (2016) is that "traffic must adapt to the city (and not vice versa)". This leads to the



following four focus points:

- Parking a private car will become easier and clearer. The city centre will become one residential zone with paid parking for visitors. In order to prevent parking pressure from spreading to the borroughs, there will be a large blue zone around the city centre, where residents will also obtain a resident's parking permit for their specific borrough.
- Road safety and quality of life are the priority. The pedestrian zones in the city centre will be expanded. Bruges signs the SAVE charter and prioritises a safer school environment.
- Heavy traffic is excluded from the city centre and from the residential areas in the borroughs. This includes new delivery windows in the city centre.
- Public transport serves different routes and uses smaller buses in order to improve the quality of life in the city centre. In 2018, the city starts a pilot project with compact city shuttle buses.

Under the supervision of Annick Lambrecht, alderwoman of mobility, a Bicycle Plan (2015) is drawn up that proposes a strategic long-term vision.

1.7

Interim conclusion: a shift away from the car (?)

In this chapter we focused on the story of mobility planning. It is a story based on two questions: how the policy fits into the CREATE framework and how the



mobility policy in Bruges evolved over the past century.

1.7.1 A reflection from the CREATE framework's point of view

There is no doubt that King Car was in charge in Bruges, as in most cities worldwide, during the 1960s. The policy is undeniably that of a 'car-oriented city'. Not filling in the Coupure canal and redesigning streets and squares brought a wind of change in Bruges in the 1970s. Thanks to the Structure plan, this policy rapidly evolves into a 'city of places' model, focussing on the quality of the public spaces. The demand-driven policy makes way for traffic demand management. Or: how the Bruges policy seems to skip the step of a 'sustainable mobility city'. A transport policy with the emphasis on pedestrians, cyclists and bus passengers instead of car drivers. And with the STOP principle as a focal point. The CREATE project also shows that the evolution of the mobility policy is not a straightforward process. Several other cities experienced a paradigm leap as well.

In most Western European cities these perspectives have broadly followed sequentially [...] In some case however (e.g. Copenhagen) an interest in Place proceeded a focus on sustainable mobility. In practice, the shift form one stage to another is much less clear cut, with overlaps and sometimes shortterm reversals of policy following an election. [...] In reality, the three stages co-exist in a city at the same point in time, but in different parts of the urban area. Stage 3 (P) policies are typically to be found in the central areas, where there are many historical buildings and high-quality public spaces, [...] Jones, 2018 Furthermore, the CREATE project indicates that a leap is never black or white, that a mobility planning phase always contains elements from multiple phases. Burgomaster Van Acker's policy, that set out a different course in the 1980s, has the characteristics of both a car-oriented city (luring cars into the city centre) and a 'city of places' (having car-free squares at the same time), as demonstrated by the car parks in the city centre. In the 1980s, topics such as 'road safety' emerge more often, characterising a 'sustainable mobility city'.

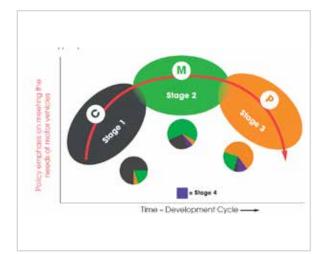
The Bruges policy also strongly illustrates the observation by CREATE that the city centre operates at a different and higher speed than the borroughs. The historical city centre makes the leap from 'car oriented' to a 'city of places' at the end of the 1970s, while it would take until the end of the 1980s or early 1990s before the borroughs followed, with a step towards 'sustainable mobility city', a some 'city of places' elements already emerge. For example, the squares of the borroughs were redesigned in the 1980s.

1.7.2 Difference between city centre and the borroughs

The fact that the policy puts different emphases between the city centre and the borroughs is not very surprising. After all, the challenges are very different from each other.

In the parts outside the Ring – the edge of the city – the situation is quite different. Here we find residential areas that are traversed by wide access roads. Drivers experience few flow problems here. Traffic flows a lot smoother, which puts cyclists in unsafe positions. The speed differences between cars and cyclists & pedestrians are a lot bigger. In contrast to the inner city, major accidents involving cyclists and pedestrians do occur here. Bonneure et al, 1982, Blauwdruk voor een verkeersleefbaar Brugge

Topics such as 'traffic liveability' emerge everywhere. The challenge first arose in the city centre. With its narrow streets, people started to support the need of change in the 1970s. In the borroughs it would take until 1980 before car traffic increased to a level that once again surpassed the carrying capacity of the roads and neighbouring areas. First it would happen on the main access roads, later also on smaller local roads which would suffer from (unwanted) cut-through-traffic and high speed traffic.





The negative effects of traffic are naturally most severe in densely populated areas. The inconveniences started to threaten the liveability. A point has now been reached where everyone is united in their conviction that appropriate measures must be taken and that any delay will make things even more hopeless.

Traffic officer Debree, in: Structure Plan, 1972

It is certain that there is a deliberate strategy to approach the city centre and borroughs in a different way. The actions and its results are the result of conscious policy choices with specific emphases. Policy choices that from the start prioritised a division between the inner city and the edge of the city. For example, Michel Van Maele, former burgomaster of Sint-Michiels for 25 years, was less familiar with the historical city centre. The new burgomaster of the merged municipality therefore left the historical city centre to his alderman for urban renewal, Andries Van den Abeele. The edge of the city remained the burgomaster's domain. Please note that the Structure Plan did in fact contain a – albeit very concise – study of the (wide) Bruges region. Or: how the structure plan did not include the interdependence between the historical centre and suburban districts.

(source: interview on 24/02/2020 with Eric Van Hove, former journalist and urban policy coordinator).

There is however no evidence that the borroughs were – intentionally or not – disadvantaged. Although it is worth noting that the vision translated into design choices that were more ambitious in the city centre, at least from the perspective of a 'city of places'. This is of course not very surprising in a city centre with a great historical value. Other interests often weigh more heavily in the borroughs, such as small firms and traders and housing quality. And that results in a more pragmatic approach, for example the need for car parks.

When I say that we will never adapt the city to traffic, it means that it is out of the question that we would for instance create wide boulevards in Bruges, or that we would construct giant parking buildings in characteristic districts such as Sint-Gillis. No, Bruges has a certain noblesse. Well, "noblesse oblige" ...

Chief police commissioner De Bree in Brugsch Handelsblad (1991)

Furthermore, one should not forget that the borroughs experienced a strong growth, while the city centre (apart from a few urban renewal projects within the existing urban fabric) rather retained a status quo. It can therefore be explained why the policy only responded to this later, e.g. extending the bus routes in 1992 (although cities such as Freiburg show that new supply can precede new demand). But that is not everything. Their growth contrasted strongly organic growth that typified the inner city for centuries. Building allotments and dwellings happened regardless the context, often literally on a blank sheet that made an abstraction of the surroundings. The policy followed in the borroughs was typical for a policy of the Flemish people with proverbial 'brick in the stomach'. Modern urbanism demanded a strict separation of functions, which led to residential areas, connecting roads with shops on both sides and business parks. This obviously encourages car dependency. Add to this the expansion of central functions, such as schools and other public functions that are no longer situated in the inner city, and this all causes an increasing pressure on borroughs and road infrastructure.

This story also illustrates that a mobility policy should not be seen separately from spatial planning. And that mobility policy is a derivative of transport demand. The main question is therefore: would a structure plan have offered a solution to the borroughs? But that path was never taken. Instead of this holistic approach, a certain sectoral plan was created in the 1980s in which – in the Traffic Livability Plan and the later Mobility Plans – mobility planning was combined with traffic planning to some extent. In regards to the Create-framework : the

24

creation of a Flemish mobility planning policy (first with a covenant and later a decree) meant a step backwards in the case of Bruges. Although we must also state that the spirit of the Structure Plan had meanwhile become so firmly anchored in the city centre and that – partly thanks to the Basic Accessibility Decree – the higher authorities also expand their view / evolved.

The role of higher authorities ultimately also explains the difference in policy. The completion of the ring road in the 1970s also meant transferring the gate streets in the historic centre from the national to the local government. This way, the city council had total control over the Bruges egg. The main roads in the borroughs were and are still managed by the higher authorities. As elsewhere in Flanders, their policy was a 'car oriented policy' until the early 21st century. In the 1960s, the motorway programme boomed, a programme that only slowed down because of an economic and then budgetary crisis. Topics such as road safety became more important later on. More attention was paid to cyclists in the 1980s, but this was rather limited to painting lines for cycle paths on an over-dimensioned road. This policy was initially characterised by a strong top-down approach. A visit by the A17 Commission was compared to a major state visit in the newspapers. Even the local government in Bruges had little impact on investment programmes until the 1990s. Participation did not exist for engineers. Though not everything is of course doom and gloom. After the regionalisation of the authorities for mobility and public domain, 'sustainable urban mobility planning' appears on the agenda. Bruges received a pilot project regarding public transport in 1992. The time of an ivory tower mentality is long past. At the beginning of the 21st century, the various governments developed and implemented a vision together to tackle the 'death trap', the national road 95 / expressway N31.

The ministers of Transport- Herman De Croo (PVV) and Jean-Luc Dehaene (CVP) turned things around -especially in the Traffic Regulations (e.g. introducing speed limits). Steve Stevaert (SP.A) provided a budget in order to tackle the most dangerous -black spots. Kathleen Van Brempt (SP.A) promoted -research into road safety and launched the first Flemish Road Safety Plan. Hilde Crevits (CD&V) paid attention to cyclists and Ben Weyts (N-VA) created the Flemish House for Road Safety and decided to limit the maximum speed to 70 km/h on roads outside of built-up areas. Dirk Lauwers, De Standaard, 4 November 2019

2 A THEMATIC EVALUATION -THE ABC OF THE BRUGES' MOBILITY POLICY

Obviously, the mobility policy consists of more than mobility plans. In a city like Bruges, many other policy initiatives leave their mark on the mobility policy. In this chapter we take a closer look at these initiatives, bringing even more nuance to the story. We group these actions randomly, using the Dutch alphabet (e.g. cars are "auto" hence the start of our journey), focussing both on past and present. The past is captured in time series (not meant to be complete but to capture important milestones), in figures (if available) and with quotes expressing the Zeitgeist. The present is a moment to reflect on the policy developments, to reflect on the great narratives within each theme.

Due to limited sources, various topics are left out. It was for example not possible to make a reconstruction of topics such as prevention or education. However, the included quotes underline a paradigm shift from education, via theoretical knowledge transfer to attitude and practical skills. It is best to keep this nuance in mind.

Due to time restrictions for this study, 'Zeebrugge' (the port of Bruges) as a topic is not covered. Not that there are no data available, quite on the contrary. The problem is however very specific and led to its own discourse (due to maritime and freight traffic), which is less relevant to the topic covered in this work which is mainly situated in the sphere of residential areas. Although needless to say that one cannot discuss topics such as the N31 road without considering the (expected) growth of the port of Zeebrugge, especially since the 1980s with for example the development of the inner port ('Achterhaven').

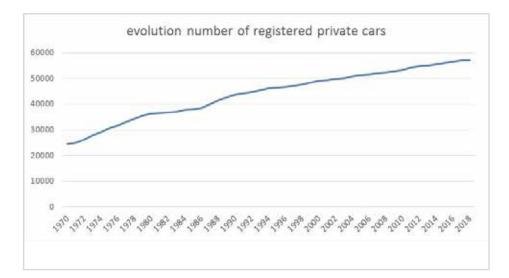
2.1 Cars

2.1.1 Increase in number of passenger car registrations

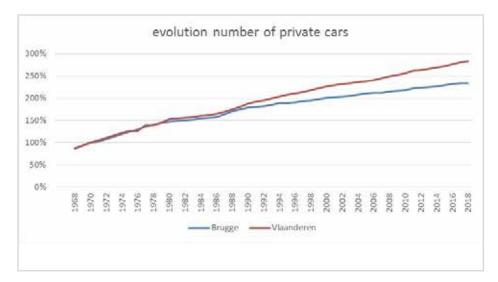
At the present moment just about half the families in Britain own a motor vehicle – not yet quite half, but very nearly. We are approaching the crucial point when the ownership of private motor vehicles, instead of being the privilege of a minority, becomes the expectation of the majority. Buchanan, 1963, Traffic in Towns

Notes:

- over the decades, the data collection has been modified several times by the NIS;
- in 50 years, the number of inhabitants in Bruges has remained more or less the same (from 117,220 in 1971 to 118,284 in 2018), although there have been shifts between the borroughs and the city centre;
- in addition, the introduction and growth of the number of company cars so-called salary cars (which can be registered outside of Bruges) – increases the number of Bruges citizens with their 'own' car.







source: annual reports National Institute of Statistics (own editing)

2.1.2 Reflection: limits to the increase of cars

The historic city was built for pedestrians and carts, not for fast motorised traffic. Cars suddenly need to access the city centre in a different way than what is now historically available. Parking cars also creates an unacceptable need for space. Thus, we see that the feverish evolution of car traffic takes an unimaginable toll on the historic city. Structure Plan, 1972

While the invention of ships meant the invention of the shipwrecks (Virillio, 1990), one can say that the invention of cars meant the invention of traffic engineering. Too short-sighted? Fact is that a city like Bruges did not have a traffic engineer on the payroll during the Renaissance. However, citizens such as Simon Stevin wandered the streets of Bruges, a type of homo universalis, holding the title of mathematician, physicist, urban planner ... It remains a fact that the invention of motorised traffic caused problems that demanded planning, regulation and the allocation of public space for the various modes of transport (CROW, 2019).

1970 - 1980: UNMASKING THE CAR IN THE CITY CENTRE

While Bruges only had three 'car owners' in 1900 (Bulletin officiel du Touring Club de Belgique, 1901, in: Weber, 2008), the increase in the number of cars would mainly be withnessed after the Second World War. Issues soon became most apparent in the narrow, winding streets of the historical city centre.

"My car ... my freedom!" This was the slogan that, until recently, reflected the mentality of those who wanted to use their individual motorised quadricycle anytime, anywhere. This is illustrated by the almost euphoric way of thinking about prosperity and progress and the hope for an almost unlimited mobility that prevailed in the 1960s and 1970s.

Burgomaster Van Acker, 1991, foreword for the presentation of the public transport pilot project

Not only the number of vehicles has an impact. Especially the speed of motorised traffic questions the logic of the streets and by extension the logic of the city. The advent of the car introduced a culture of movement (Weber, 2008), whereas transport in an urban context was previously merely about moving loads. Speed for instance impacted the functioning of the streets. After all, public life starts when we slow down (see Appleyard & Lintell, 1972; Sennett, 2019, Gehl 2010, Montgomery, 2013). The higher the speed, the less we understand the environment, humans are horizontal animals by nature, walking at 5 km/h (Gehl, 2010). Put in other words: the influx of cars in the 1960s and 1970s created distance instead of bringing people together, which is the essence of the city. In a certain sense, the advent of the car meant a certain privatisation of public space. And as stated, the car quickly reached the limits of the carrying capacity of a historical city centre as the one in Bruges.

The plan that now is proposed covers a street phenomenon, namely traffic. Streets used to be at the heart of a neighbourhood or of a meeting place where people gathered. This has changed completely due to moving traffic and parked vehicles. Instead of being a binding element, streets have become a barrier to human relationships. Cars have clearly contributed to the fact that people live more side by side. However, urban culture plays a specific role in enabling as many encounters as possible between people to make a special contribution to the continuous development of new ideas and transfer of culture. We passionately believe in the meaning of a living city heart, a wonderful ensemble of shops, government buildings, offices, museums, restaurants, services, houses, etc.. [...] However, tyrannical traffic has transformed this valuable cityscape into a chaotic situation. [...] The funny thing is that intensive traffic makes such streets seemingly more lively: in fact, it is a process of deterioration in quality of life. Burgomaster Van Acker, 1978

The Structure Plan therefore reversed the roles and introduced the principle that stipulated that the city should not adapt to traffic, but vice versa. Subsequent (mobility) plans would always endorse this principle. In concrete terms, this resulted in actions such as the roll-out of two circulation plans (1978 and 1993), the introduction of 30 km/h zones in the city centre (1993), the development of a centrifugal parking policy, the redesign of streets and squares tailored to the historical city centre, a call for a public transport system for the city centre ... Important to stress that this principle does not mean that cars are specifically targetted (which the following topics and chapter 3 will show).

1990 - 2000: UNMASKING THE CAR IN THE BORROUGHS

The sprawling of the city also proves the fact that cars create distance by diffusing city's functions and its inhabitant.

After the merger of (Greater) Bruges, the number of inhabitants has fluctuated around 120,000 over the last 50 years. This figure does not reveal the shift from the city centre (-5,000 inhabitants) to the borroughs. Although it would not be right to 'blame' the car integrally. The expansion of public transport and the housing policy of the national government also played their part. Moreover, such figures make abstract of other e.g. demographic trends, for instance the phenomenon of reduction in family sizes. Nevertheless, the fact remains that the transportation behaviour changed and journey distances expanded. The car made it possible to cover longer distances within the same time set to go to work, shops, sports clubs, etc. This meant that the pressure on the quality of life outside the city centre also increased systematically so that in the 1980s the proverbial alarm bells also rang in the borroughs as well. It is therefore hardly surprising that the Traffic Liveability Plan emerged in 1990.

Various counts of the number of cars and freight traffic on the main road network of Bruges demonstrated that flow problems already occur at certain spots [...] With the expected increase in overall traffic intensities, this may have harmful consequences, even in the short term, both for the flow of traffic and the quality of life in residential areas outside the city centre.

press file Traffic Liveability Plan, 1990

It is in this context that the Traffic Liveability Plan expresses the following ambition:

The traffic liveability plan proposes measures to keep unnecessary traffic out of the residential areas that are mainly situated on the edge of Bruges. This is not done by stand-alone measures (e.g. a speed bump in only one street) that encourage motorists to use shortcuts in the immediate vicinity of the operation. In other words, the proposals should provide an integrated solution for the enlarged area.

2010 - PRESENT: UNMASKING THE CAR IN THE BRUGES REGION (?)

There is no doubt that the plans paid off. Citizens of Bruges stopped using their car more than the average Fleming. Graphs show that the Bruges car ownership differs from the Flemish car ownership. The modal split also shows that citizens of Bruges are less auto-minded than the average person. The car usage is also significantly lower in other central cities compared to the car usage of the average Fleming (see Transportation Behaviour Research (OVG), City Monitor, etc.). It is of course risky to also apply these figures to the entire Bruges region, but we can still say that Bruges provides a better report in this respect than the neighbouring municipalities.

But can there also be a change in direction on an urban-regional level, following the example of the city centre and the borroughs? Have the limits to the growth of the cars been reached there as well? And does the car also here clash with the limitations regarding infrastructure and capacity? Preparing a regional mobility plan in implementation of the Basic Accessibility Decree (2019) seems to offer a window of opportunity.

We do not know yet what the future will hold. The past teaches us that a change of course is possible.

FINAL THOUGHT: NO WAR ON CARS BUT A QUEST FOR A LIVEABLE AND SAFE CITY

Of course we do not know what the future will bring. However, it is more likely that – similarly to other parts of Flanders – the total number of vehicle kilometres will decrease here as well and that Bruges and its region will experience the phenomenon 'peak car'. As Newman & Kenworthy (2011, 2015) argue, not only the city council should be given credit. Also growing environmental and climate awareness play for example a role. But neither can one say that a city council does not contribute to such trends. This is also demonstrated by the spatial planning decisions and the stimulation of combination mobility and car sharing (in which Bruges played a pioneering role in a Flemish point of view).

1996 start car sharing via garage De Krikker (in collaboration with Volkshogeschool Bruges). first car sharing project in Flanders 2004 start Cambio in the city centre of Bruges 2015 expansion of Cambio to the borroughs (Assebroek and Christus-Koning) 2020 introduction of the first electric car-share vehicle at the Sint-Jansplein

Given the real mobility demand, the question is not whether there will still be cars in the future but how much space cars will get and where. This is also the case in the historical city centre where there is a growing support for a more car-free centre although with respect for e.g. local inhabitants.

Cars must behave like pedestrians when they are deemed useful. Every traffic model must be able to preserve the city centre. Structure Plan. 1972

To me, a liveable city centre is not synonymous with banning car traffic in the city centre. Residents should be able to park their cars close to their homes in order to make Bruges an attractive place to live in. I refuse to turn the city centre into a ghetto. Every location must remain accessible by car. Burgomaster Moenaert, Brugsch Handelsblad (2000)

2.2

Buses

Time series 2.2.1

- first vicinal railway Bruges Westkapelle 1890 Knokke – Heist
- first tramway line (train station Kruispoort) 1892
- opening depot in Assebroek 1903
- 1911 last horse tram
- 1913 first electric tram (Bruges – Assebroek)

1923	first bus in the Bruges cityscape (line Bruges - Blankenberge), private initiative
1947	Sanitation Committee examines the dossier on the loss-making tram activities within the
	-
1949	NMVB (National Vicinal Tramway Company) proposal by NMVB (predecessor of De Lijn) to
1950	replace city trams with buses strategic decision by the Bruges city council
1750	to replace trams with buses, soon followed by
	the implementation of buses for the route to
	Sint-Michiels and Oostkamp
1951	ride of the last city tram
1956	ride of the last vicinal tramway
1750	(Bruges – Knokke)
1978	announcement of Bruges as a pilot city with
1770	the implementation of city buses
1979	establishment of the task force 'Betere
1,7,7,7	Doorstroming Openbaar Vervoer'
1979	first bus lane between the Zand and Station
1777	(Koning Albert-laan)
1980	pilot project with the Bruges city bus from the
1700	company Jonckheere Eagie
1982	first traffic light induced by buses at the
	Eiermarkt
1982	dispatch of school transport on the
	Kanaaleiland car park (national pilot project)
1984	inter-city bus traffic ('regional routes') is
	banned from the city centre (in concrete
	terms, this concerns 16 routes, intensities
	varying between 5 and 70 journeys a day,
	more than 400 buses daily), the Zand becomes
	the hub instead of the municipal theatre
	(completely disappeared in 1988).
1987	spontaneous strike by bus drivers concerning
	the "endless traffic jams in the city centre".
1988	the special finance act gives Flanders the
	authority over urban and regional public
	transport services, with the exception of the
	railway network (NMBS, National Railway
	Company of Belgium)
1990	construction bus terminal the Zand
1990	Traffic Liveability Plan, introduction of the
	concept of peripheral car parks ('randparking')
	and Park&Rides
1990	(decreed) establishment of the Flemish
10.00	Transport Company - De Lijn
1992	new public transport plan with new city buses
	('midi buses')
	These buses will provide a connection in
	the shape of a star between the edge of the
	agglomeration and the city centre. The frequency for all bus services is brought to 20
	minutes (now sometimes 30 or even 60
	minutes (now sometimes 50 or even 60 minutes).
	The buses are characterised by an extra
	high manoeuvrability, a low floor to help

getting on and off the bus, a design that fits in with the surroundings, a maximum reduction of noise and minimum environmentanuisance)s. Brugsch Handelsblad, 10/05/1991 introduction evening buses introduction of the Park+Bus station's car park replacement/construction of 140 bus shelters contract with Decaux pilot project with hybrid city bus (battery diesel) ... but died a quiet death in 2001 decree on passenger transport with implementing decision on basic mobility bus service expansion in response to the Mobility Plan (2004), including the introduction of dial-a-bus (Dutch : 'belbus') in Bruges North implementation bus fare of 1 euro (the city council, as a third party payer, matches the difference with the payment card rates) bus lane on the high Katelijne bridge 2004/5 bus lane on the Baron Ruzettelaan first (and so far only) bus trap (Dutch : 'bussluis') in Zagersweg De Lijn publishes its Neptunus-plan, which includes the idea of a light rail connection from Bruges to Ostend and Zeebrugge. opening of new depot for De Lijn (also the driving school moves from Ostend to Bruges) debate on creating a bus stop in the Vlamingstraat pilot project with electric city bus failed introduction of bus lanes on the small

1994

1995

1996

1999

2001

2004

2004

2004

2005

2007

2011

2013

2015

2016

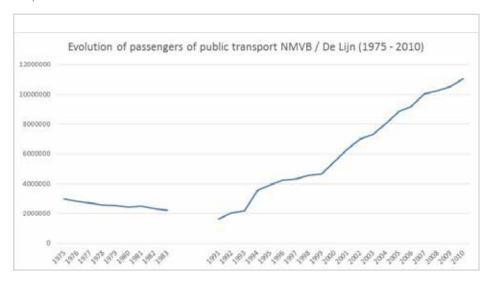
ring road (Komvest) (an illustration of Murphy's law: because of a defective Kruispoort, the ringroad at the Komvest suddenly has to deal with higher intensities ... while the capacity was reduced by the introduction of a bus lane)

- 2016 pilot project with fewer city buses through the city centre
- 2017 protest Vlamingstraat – Sint-Jorisstraat "423 buses a day are too many"
- 2018 pilot project by the city council with compact shuttle buses
- 2019 the city council approves (in anticipating the new Basic Accessibility Decree) a new vision for public transport in which the core network is organised through 1° an urban network (compact, electric vehicles for the city centre), 2° a suburban network (service to suburban districts) and 3° regional routes 2019 approval Basic Accessibility Decree
- 2019 pilot project with electric shuttle bus by the city council

2020 provisional determination of a new public transport plan as a part of the implementation of the Basic Accessibility Decree

2.2.2 Number of passengers

source: own data from NMVB annual and other reports (1991 figures) and De Lijn (after 1991)



2.2.3 Reflection: the rise, fall and revival of public transport

BEFORE 1970: THE RISE AND FALL OF THE 'TRANSIT CITY'

The invention of the internal combustion engine not only meant the invention of the car but also the invention of public transport. Trains and trams initiated a first transport transition at the end of the 19th century. Also in Bruges that – in the terminology of the CREATE research (Jones, 2018) – transformed from a 'walking city' into a 'transit city'. A layered transport system avant la lettre was introduced, consisting of railways extended with vicinal railways. The idea was to extend the large railways with local, smaller branches. And this for both passenger and freight transport. The idea behind it? To transport workers as well as agricultural and industrial products to the cities and industrial centres faster and cheaper. This may sound a bit ironic since this is how public transport paves the way for its later downfall. Public transport was namely one of the main reasons why the city centre faded. Workers could also live on the edge of the city thanks to trams (Uyttenhove, 2011). This was also the case in Bruges, where in the 19th century the surrounding municipalities (now borroughs) such as Assebroek, Sint-Kruis, Sint-Pieters etc. back then consisted of just a small core around an obligatory church and cafés. The city edge grew alongside the growth of public transport. The decay was initiatied for the Bruges city centre, which also did not experience a lot of industrialisation.

But times were changing once again. After the Second World War, the tram's heydays are over. Rising wage costs and stagnating revenues means the vicinal railways has to book heavy losses. This is not only the case in Bruges but also on a national level, where a sanitation committee was established in 1947. It was not very effective. A new exploitation model is necessary. "The tram is dead, long live the bus", argues the Bruges' city council. With success, it seems, because the nine tramways from 1952 are transformed into eleven bus routes in 1964. Although passenger numbers are increasing, the glory days of public transport are over by then. The bus will have to give way as well. Literally even, because the first circulation measures in the historic centre target the cumbersome buses. Long live the new king, King Car.

The tram may have disappeared from the streets in the 1950s, its spirit is still wandering around. Bus lines routings mirrors the old tramways, along the radial roads and through the gate streets. The square in front of the City Theatre transforms into a hub for buses. The seed of a new conflict is planted : bus versus city centre.

THE LOVE-HATE RELATIONSHIP BETWEEN BUSES AND THE HISTORICAL CITY CENTRE

A flexible public transport system must be implemented when traffic jams in the city centre increase. The current buses are also too big for the city centre of Bruges. It is essential to look into the possibility of a smaller, low-speed, high-frequency type of bus that is equipped to accommodate disabled people as well as mothers with strollers [...] As a number of car parks keep visitors out of the city, bus transport will have to operate smoothly with the car parks and the city centre. Structure Plan, 1972

The Structure Plan is very clear: public transport is one of the keys to a liveable city centre. But the Structure Plan does not simply give carte blanche. The plan immediately calls for "a smaller, low-speed type of bus" while being loyal to the Structure Plan's basic premise, which is respecting the historic centre. Isn't that a contradictio in terminis for public transport that would have to compete with the car regardless? A eu-topia, a better place? Or a u-topia after all? Either way, it means the starting point for a debate that remains unresolved till today.

This contradicton is not really something new since trams weren't given carte blanche either in 'Brugge die Scone'. At the end of the 19th century, a first awareness of heritage had already imposed restrictions.

Steam locomotives within the city were not very welcomed, especially because of the emission of black smoke mixed with steam. On the other hand, people were wary of the overhead wires needed for the electric trams, mainly for aesthetic reasons. After all, the intention was to keep the steam trams out of the city gates and to provide connections to the city centre by electric trams.

Annys et al, 1994, De Brugse Stadstram

The statement in the Structure Plan is prophetic for the difficult balancing act that followed. Since the 1970s, public transport in the city centre was a sensitive topic. The most remarkable aspect was the debate on the vehicle type, although the route layout was also discussed several times as well.

The search for the ultimate ideal vehicle had a false start in the 1970s. It didn't take long for a pilot project with 'city buses' to fail.

The project with the city buses is a flop. Because of their specific construction, the vans were by no means an example of directional stability. "You can say they were extremely dangerous," a driver confides to us. It is therefore no coincidence that they have come to an inglorious end and have now disappeared from the cityscape.

Brugsch Handelsblad, 20/11/1987

If other vehicles cannot do the job, maybe different routes can. The regional routes ('regional buses') were gradually banned from the historical city centre in the 1980s.

Because people wanted to get rid of the "bus monsters", the city council kept the regional buses completely out of the city centre since 1987 after much insistence. There are now central interchanges for these buses at the Zand and of course in front of the station. Only city services are allowed to still drive through the city centre. Keppler, 1987, Verkeersplanning voor de Brugse Binnenstad

In the early 1990s, a second attempt took place in regards to the vehicle type. Bruges is selected as pilot city for a new type of public transport: a pilot project of the new regional transport company De Lijn (which was established in 1990 by merging various local providers), to develop an integrated city and regional transport offer in Flanders. New, 8m99 long, compact city buses are introduced in Bruges. Thanks to a new trajectory (the star-shaped model that city bus services in the borroughs use to serve the station, Zand Square and Market Square), the city council and De Lijn came to an agreement in 1993.

However, the debate erupts again twenty years later. The new trajectory implies a concentration model, buses mainly driving through the gate streets and the central shopping streets in the city centre. Streets such as the Zuidzandstraat have to cope with up to 476 buses on weekdays. Complaints about damage to (historic) buildings and roads, about the traffic liveability being under pressure resonates in the city hall.

A standard bus passing through the street is the equivalent of 100 cars passing through (however Bruges uses smaller city buses). This means that for the buses alone, the road surface in the Zuidzandstraat has to withstand a frequency of almost 50,000 cars per day. However, the cobbled road surface used in the city centre of Bruges can only withstand a frequency of 10,000 vehicles per day. Evaluation Mobility Plan (2011)

Trop is too much. The relationship between De Lijn and the city council reaches a freezing point. The new Mobility Plan (2016) repeats the thesis of the Structure Plan, stating that traffic must adapt to the city (and not vice versa). The city expands the pedestrian area and De Lijn has to deal with bus route adjustments.

May I note that all local councillors think that the current situation is unsustainable? Yes? Then that is a powerful political statement.

At the city council meeting, Burgomaster Landuyt asked and was given full support of the city council to denounce the problems with the buses of De Lijn in the historical city centre. The buses run through the shopping streets in the city centre up to 740 times a day causing all sorts of issues, such as road damage and traffic jams. [...] Some people within De Lijn do not want to abandon the current structure. They are still of the opinion that the city should adapt to De Lijn. We call for respect for our residential and shopping streets. Het Nieuwsblad, 05/03/2015

However, the star-shaped model remains unchanged. As communicating vessels, the pressure shifts unintentionally, criticism reaching new heights. Residents of the Vlamingdam for example are stirring. The city council calls for a new public transport model that no longer uses the star-shaped model but instead implements small, compact vehicles. A pilot project with shuttle buses would follow in 2018.

I would therefore like to propose to shift the main axis of bus transport all the way to the axis between the concert hall and the station. This means that the bus stop at the concert hall becomes the hub for large buses. From there small buses can enter the real city centre. Landuyt, 2012, Met Goesting De Lijn seems to be the black sheep. Not just in Bruges, also in other cities such as Ghent and Antwerp, where people even call for an own public transport company (and thus a turning back of the clock). In 2019, a new council uses the Decree on Basic Accessibility to initiate in a new dialogue with De Lijn. A critical reflection on the star-shaped model and a first evaluation of the pilot project with compact shuttle buses are translated into a strategic vision. The paper advocates for a layered core network, consisting of city routes (with compact vehicles in the city centre), suburban routes and regional routes (which already left the city centre in the 1980s). The vision calls for an interconnection of the network at the station and the Zand.

Third time lucky? History is still being written ...

AND THE BORROUGHS?

Each milestone in the city centre was also a milestone for the borroughs. Debates were rather the exception and generally remained a local affair (e.g."Will this particular neighbourhood retain the current loop or will we make small adjustments?").

If electric trams disappear in the city centre, so will steam trams in the borroughs. If the number of passengers continues to decline in the city centre, so will the number on the edge of the city. The problems reach a climax in the 1980s. The regionalisation of city



and regional transport (1988) creates an opportunity for a pilot project that implies also opportunities for the borroughs. The frequency increases with buses every 20 or even every 10 minutes. New or extended routes are created since the city is fanning out, all in all accounting for more than 1 million extra bus kilometres in 1993. The Flemish policy is also creating other opportunities. Thanks to the 'basic mobility' principle, the bus-on-demand ('belbus') initiative is introduced in the north of Bruges. Traffic flow measures such as bus lanes are implemented on access roads such as the Baron Ruzettelaan.

The result? De Lijn breaks one record after another in Bruges since the 1990s. Although Bruges is rather a mediocre pupil from a Flemish point of view (see the City Monitor) and became worse over the last decade. De Lijn's savings put pressure on the transport offers. The Basic Accessibility Decree (2019) wants to represent a fresh start here as well. In 2020, a new demanddriven operation will be developed in a budget-neutral manner. To be continued ...

2.3 Circulation

All these winding bends and arabesques are obviously picturesque, but try to actually drive through smoothly and safely by heavy traffic. as Already in the early Middle Ages, it must have already been a puzzle. This is shown in a fourthcentury regulation stating that an enforced oneway traffic was implemented in the city centre streets on market days and public holidays. Thus, one-way traffic is in fact not a new invention. Vlaams Weekblad, 23/09/1977

2.3.1 Time series

- 1951 implementation of a circulation loop for buses between the Zand and Market Square and implementation of one-way traffic for buses in Sint-Amandstraat
- 1955 implementation of one-way traffic in 38 streets in the city centre (including Breidelstraat, Genthof, Philipstockstraat, Sint-Amandstraat and Zilverstraat)
- 1955 first circulation measures outside the city centre, in two streets in Sint-Pieters, namely the Veemarktstraat and Sint-Pietersgroenestraat (Zeebrugge follows in 1961, not coincidentally in streets with freight traffic)
- 1961 first circulation loop, between the Zand (see top plan) – Market Square (see bottom plan) (note: this loop is in the opposite direction compared to the one today)

Parking measures are also taken, such as a ban on stopping and parking in parts of the Steenstraat and Zuidzandstraat or alternate-side parking in the Geldmuntstraat.

- 1962 implementation of one-way traffic around the Hall Tower and adjacent streets
- 1963 publication of the famous Buchanan report 'Traffic in Towns'
- 1972 Structure Plan that translates the insights from the Buchanan report into a Bruges' traffic model
- 1972 implementation of one-way traffic in various streets in Sint-Jan in de Meers
- 1978 new traffic plan is approved, one-way traffic became the rule in the city centre
- 1984 adjustment of the direction of flow in Sint-Jakobsstraat and surroundings following redesign
- amendments of the Traffic Regulations





(national level) with more attention paid to cyclists and pedestrians, cyclists will be able to ride in both directions under specific conditions (which were initially very strict) thanks to special road signs in one-way streets ("limited one-way traffic")

- 1992 new circulation plan in which the Market Square no longer functions as a circulation loop
- 1994 limited extension (6 streets) of limited one-way traffic in the city centre as a result of the Fietsoverleg Brugge campaign
 1997 no parking at the Market Square, the loop
- Filipstockstraat Wollestraat is cut extention of limited one-way traffic in the city centre due to relaxation of traffic regulations
- 2004 two-way traffic for cyclists in 98 streets or street sections, limited one-way traffic in the city centre will now be the rule 2017 sump buster on the Diksmuidse Heirweg
 - 01/ sump buster on the Diksmuidse Heirweg (Zedelgem)
- 2018 first neighbourhood mobility plan (Zandstraat, Sint-Andries), inspired by the Fietsberaad research Fix-The-Mix, a proposal for the introduction of a circulation plan is submitted, but not retained because of a lack of public support

2.3.2 Reflection: how one-way traffic in the Bruges city centre gradually became the rule

It is a well-known saying among traffic experts: if you design cities for cars, you get cars (amongst others Gehl, 2010) ... And that is exactly what happened in the 1950s and 1960s. The proverbial red carpet was rolled out for cars. The medieval street pattern, which organically originated and was built for horse and cart, soon reached its limits. Instead of being stopped, the cause was only treated symptomatically with local circulation measures and regulations to restrict local parking.

Alternate-side parking was implemented in the Wollestraat at the beginning of 1958, something the Vicinal Tramway Company strongly demanded. In the last 5 months of 1957, buses had hit 8 stationary vehicles and due to double parking, there was only a width of 1.5 metres left for cars to pass. Naturally, traffic was congested all the time. Annys et al, 1994, De Brugse Stadstram

The situation was hopeless. In the 1960s, circulation measures spread like a wildfire but there was no global vision. The Structure Plan therefore introduced a new traffic model for the city, inspired by the work 'Traffic in Towns' by Buchanan (1963). Central to the concept is the realisation of a 'traffic barrier', a low-traffic or even carfree pedestrian area that makes it impossible for traffic to traverse the city centre. The introduction of loops should safeguard the accessibility of the city centre. Hence the traffic model calls a halt to through-traffic and facilitates local traffic in a considered way.

It is a mistake to solve traffic problems by trying to adapt the road infrastructure. Only the symptom is tackled, not the root cause. [...] Traffic problems can be solved by adapting human activities to the available traffic capacity. This capacity must respect the city's structure.

Structure Plan, 1972

We were now face to face with the environmental management problem [the traffic capacity, author's note]. We had, as it were, brought the traffic to the several 'gates' of the old city. How much could now be admitted and through which gates? [...] The answer appeared to lie in dividing 'barriers' to cross-movements which would have the effect of breaking down the whole area into sub-units, each with gates to the network, but without direct connexion to each other.

Traffic in Towns – case study Norfolk, 1963, Buchanan

It would however take until 1978 until a new circulation plan was drawn up, not coincidentally one year after the ring road was completed. The plan pragmatically opts for a transitional scheme – as argued in the Structure Plan – and consists of a central loop and four loops connecting to it. The central loop is formed by the Market Square, the Vlamingstraat and the Schouwburgplein. A hard traffic barrier and a pure application of the loop model have not yet been implemented. In short: it is not clear yet whether the circulation plan opts for (using the terminology of the CREATE framework) a 'car oriented city' or a 'city of places'.

Firstly, one-way traffic equals by definition a smoother circulation. Secondly, one-way traffic increases road safety. Thirdly, wider pavements can be created in the city centre when there is no more cross traffic.

Burgomaster Van Acker, Vlaams Weekblad, 16/10/1980

The plan has an immediate positive effect on liveability and safety. However, there is also criticism. One-way traffic also imply that bus journeys split up (no similar routing going to or from the city centre), making public transport less readable. The toughest criticism, however, comes from cyclists, who also had to comply with the new circulation plan.

We notice that one-way traffic is almost always introduced as a solution to car-related problems, such as too narrow streets, poor circulation, too little parking space, cut-through traffic, etc. Cyclists are not responsible for these problems but have

become the main victim of one-way traffic. Brugse Belangengroep van Fietsers, 1981, Fietskrant

This plan hits its limits as well. Traffic was once again congested in the late 1980s. The demand for a more decisive action increases. A new circulation plan is introduced in 1992. The urge for a 'traffic barrier' increases. As a result, the fifth loop with the Market Square serving as the hub disappears, although it would continue to serve as a car park until 1997.

The days in which it was possible to crisscross the city centre with the Market Square and Kuipersstraat / Eiermarkt axis as a loop are over. All parts of the city centre will still be very easily accessible, however, the intention is to reach the city centre by using the ring road and the right access road, without driving through the core of the centre.

brochure "Action plan 'Hart van Brugge', 1992

The market square can only be a real meeting place again if the square first get rid of all the pieces of metal on four wheels. alderman of public works Dirk De fauw, 29/03/1996, Brugsch Handelsblad

Results soonly follow. An evaluation report in 1993 indicates 9% fewer cars in the morning peak hours and 7% fewer cars in the evening peak hours. There is even a decrease of 29% at the Market Square. Although the number of cyclists rises by 21%, cyclists once again felt forgotten. Even though a window of opportunity was offered to implement 'limited one-way traffic', it would take until 2004 before the limited one-way traffic status became the standard in the city centre.

Since 1 January 1991, road authorities may allow limited one-way traffic under certain conditions (contra-flow cycling in one-way streets). Most municipalities did not use these possibilities, mainly because they weren't sure about the road safety aspect. However, it turned out that traffic dangers did not increase due to limited one-way traffic at locations where it was in fact implemented. In case of limited one-way traffic, car drivers and crossing cyclists approach each other frontally. Thus, the mutual visibility is in principle optimal and eye contact solves the "confrontation" in a natural way. Problems that sometimes emerged at the intersections could usually be solved with limited infrastructural interventions. The combined Royal and Ministerial Decree of 18 December 2002 reversed this logic: first it was allowed to implement limited one-way, now it is compulsory in all one-way streets that meet the pre-conditions. Only streets where safe one-way traffic is not possible may be excluded, according to the road authorities.

BEV - voor een veilige veralgemeende invoering

van het beperkt eenrichtingsverkeer, 2004, BIVVbrochure

AND THE BORROUGHS?

Although the road profile is neither far from ideal in the borroughs (making it difficult to construct comfortable cycle paths on access roads for example), bottlenecks that affect the traffic flow outside the city centre are rather the exception. Nevertheless, one-way traffic could also help to improve the quality of residential areas, as confirmed by the traffic liveability plan (1990) and argued in the first neighbourhood mobility plan (Zandstraat, 2018). However, those actions weren't approved by a lack of public support and a more drastic change is still waiting.

An interesting observation: the first circulation measures outside the historic centre were already taken in Sint-Pieters and Zeebrugge in the 1950s. The motivation? The advent of the truck, so local streets reached their capacity.

Once again, the need and especially the policy opportunity does not seem as urgent in the borroughs as in the city centre, except for locations where the traffic capacity truly demands it.

2.4 Heritage

2.4.1 Time series

- 1877 implementation of the grant scheme for 'Artistic Restorations' (Dutch: Kunstige Herstellingen), a first wave of restoration strengthens the breakthrough of the (neo) Gothic Revival
- establishment of the 'Committee for Urban 1904 Beauty' (Dutch: Commissie Stedenschoon) 1964
- Venice Charter (Unesco)
- publication 'Pleidooi voor een Maatschappij 1965 voor Herstel', followed by the establishment of the Marcus Gerards Foundation to denounce the (imminent) demolition of valuable heritage
- establishment of Municipal Department of 1971 Heritage Conservation and Urban Renewal
- 1972 elaboration of the Structure Plan which put Bruges on the international map as a pioneer for urban renewal and responsible handling of architectural heritage
- European Year of Architectural Heritage 1975
- 1975 approval of the ICOMOS 'Resolutions of Bruges: principles governing the rehabilitation of historic towns' (ICOMOS-General Assembly, 25 – 30 05 1975, Rothenburg ob der Tauber

	(Germany))
1978	city council's principle decision to replace
	asphalt concrete with cobblestones
1980	vzw Trefpunt organises a cobblestone debate
1990	action 'SOS voor een Leefbaar Brugge'
1991	Fietsoverleg Brugge organises a rattling cycling
	tour denouncing the use of cobblestones
1996	implementation hotel freeze in the city centre
	(a stop on building new hotels)
2000	the city centre of Bruges is recognised by
	Unesco as a world heritage site (after the
	Bruges Beguinage was already listed in 1998 and
	the Belfry in 1999)
2012	Management Plan (in response to Unesco
	recommendations in 2010, including an
	evaluation of) the Structure Plan)
2016	Materials Memorandum reflecting on the
	street pavement in the historical city centre
2019	principle statement saying shared e-scooters

("steps") will not be offered in Bruges because of e.g. the visual impact on the streetscape and the non-compatibility (safety) between e-scooter and cobblestone

2.4.2 Reflection: heritage policy as an opportunity and a challenge for a mobility policy

The fact that Bruges has a tradition in heritage care is an euphemism. The story goes back to the late 19th century, when the idea of Bruges as a museum city was launched. And yet it took until the mid-1970s before Bruges withnessed a paradigm shift for the city centre. Inspired by the Unesco Venice Charter (1964) and initiated by the Marcus Gerards Foundation (founded in 1965), the Structure Plan presents a new vision of the historical city centre. Not a vision for a static stand-still, such as the Flemish museum complex Bokrijk that closes each night, but a vision for a vibrant city, with respect for its heritage.

The core problem of historic Bruges is a dialectic between "preservation" and "renewal", a "tension" between "existing structures and forms" and "new contents".

Structure Plan, 1972

The history of Bruges is a story of growth and constant change. The challenge for our city is therefore to develop a plan that both guarantees the preservation of its essential character and can cope with the necessary changes to adapt to modern life requirements. Bruges City Council, 1981, publication Bruges Urban Renewal and Heritage Conservation

The plan also provided a new vision with regard to traffic in the city centre. The new traffic model calls for traffic fit to the scale of the city – the urban DNA. The plan acted as a lever for a low-traffic city centre

and at the same time challenged sustainable modes of transport to be both eco- and urban-friendly. Buses? Yes, but respecting the city centre, literally in size and in intensity. Bicycles? Yes, but respecting the city centre. For example, a cyclist bridge (such as over the Coupure canal) should not only meet high functional but also high aesthetical standards.

The new vision offered not only an opportunity but created also a challenge. Or – if the glass is half-empty – also a threat, illustrated by the Bruges' cobblestone. When in 1978 the principle decision was made to replace asphalt with cobblestones, the new burgomaster Frank Van Acker was caracterized as the proverbial villain and was soon nicknamed "Frank Kalseide" (Frank Cobblestone). In 1980, there was even a real cobblestone debate, defending the policy. The city council refused to change course. And since then, the cobblestone debate appears every now and then, only to disappear into the canals again, as if it were the Loch Ness Monster of Bruges. Following the Management Plan (2012), a new vision was elaborated in the Materials Memorandum in 2016. In addition to cobblestones, sawn natural stone (e.g. granite) can now also be used on the main streets, firstly introduced in the Geldmuntstraat (2015).

Years ago the general opinion was that achieving a smooth road surface was the best way to facilitate the traffic increase, and thus the government made sure to quickly asphalt the busiest streets. Het Nieuwsblad, 16/03/1978 In some streets it is a real challenge to maintain balance on a bike. People who start to wobble, carry groceries or have a child on the back of a bike take a great risk. [...] These streets are so bad for both the body and the bike. It doesn't need much further explanation: these streets are terrible for your bottom, hands and wrists. If you are in less good physical condition or if you have painful bones, these streets are simply inaccessible. letter Fietsoverleg Brugge, 1990, to Burgomaster Van Acker

2.5 Bicycles

2.5.1 Time series

1972 cycling is a footnote in the Structure Plan stating "Bicycles are the appropriate means of transport in Bruges"; no policy recommendation is linked to this, on the contrary, the traffic model is based on an extension of one-way traffic (for which there was no legal exception for cyclists at that time), although making the city centre more low-traffic is of course an added value 1974 criticism of the implementation of one-way traffic from De Lastigen Bruggeling (vol. 1, issue 1) Why not allow two-way cycling everywhere? And a separate lane so that cars don't get in the way? Don't cyclists have to make absurd detours to get to their destination? [...] Cyclists are brutally repressed by the tyranny of car traffic!



1976	the BRT (precursor of the Flemish public	1995	second non-obligatory roadside cycletracksfor
	service broadcaster VRT) launches a 'cycle		cyclists (Boeveriestraat)
	path action'	1996	1,600 more bicycle parking spaces at the
1976		1770	
1970	first on street bicycle parking in Bruges (e.g.	1000	station
	Dyver, Market Square, the Zand) as a measure	1998	Test Aankoop declares Bruges and Hasselt as
	to keep pavements clear and to prevent		'cycling cities of the year'
	incorrect parking of bicycles	1999	extention of limited one-way traffic in the city
1976	an issue of De Lastige Bruggelingen (vol. 3,		centre thanks to less strict traffic regulations
	issue 3) dedicated to cycling 'Hoe sterk is de	2001	Mobility Plan paves the way to realise a cycle
		2001	network route
	Brugse fietser?' ('how strong is the cyclist in	2001	
	Bruges ?')	2001	Cycling Facilities Manual (Flanders)
1978	introduction of the first Circulation Plan,		("Fietsvademecum")
	criticism of one-way traffic grows	2003	expansion of bicycle parking in the city
1978	cycle route plan for the city centre		centre (albeit with legal proceedings
1980	opening of the Old Railway-track (Assebroek)		concerning permit requirements)
.,	as a new pedestrian and cycle axis	2004	limited one-way traffic in the city centre is the
1981		2001	
1901	growing protests regarding the absence of a		rule, two-way traffic for cyclists is
	cycling policy, e.g. from Cactus '80.		implemented in 98 streets or street sections
1982	publication 'Blauwdruk voor een	2007	city marketing campaign 'Brugge Fietsstad'
	verkeersleefbaar Brugge' advocating a		(Bruges Cycling City)
	cycling policy	2007	opening Fietspunt (cycling service spot) at
1982	establishment of the Bruges Cyclist Interest		the station
17.02	Group (BFF, Brugse Belangengroep van Fietsers)	2008	bicycle rental for students
1002			
1983	proposals for a plan to construct a 'cycle path	2008	study 'Plan voor bijkomende parkeerruimte'
	belt around the city' (a study started in 1978		calls for more bicycle sheds in the city centre
	which resulted in the realisation of a cycle	2009	acquisition of 600 mobile bike parking racks
	path along the Vesten)		(Movilo) (a national scoop)
1983	first Fietseling (a cycling event) organised by	2009	'Bicycle Master Plan for the port of Zeebrugge
	the 'Groene Fietsers'		and surroundings' with 54 concrete
	A 'fietseling' is a completely non-violent		action points
		2010	
	means of action in compliance with all traffic	2010	realisation of the Ramparts Route as the final
	regulations, with a long string of cyclists riding		part of the cycle route network, which is thus
	in a line to cause traffic snarls		(almost) completed
	Brugsch Handelsblad, 30/09/1983	2010	installation of the first bicycle lockers in the
1983	Bruges Cyclist Interest Group calls for a safer		city centre
	ring road	2012	opening bicycle parking the Zand (off street)
1983	opening Kerkebeekpad (Sint-Michiels)	2012	opening of bicycle bridge over the Expressway
1984		2012	
	first traffic light for cyclists	2012	(Koning Albert I-laan)
1987	abolition of bicycle taxation (bicycle plates	2012	opening Smedenpoort bridges
	disappear from the streetscape)	2013	appointment of a city cycling policy officer
1990	first Fietseling organised by the action group		(until 2018 – position no longer active within
	Fietsoverleg Brugge (FOB)		the staff)
1991	amendment of the Traffic Regulations with	2014	launch of the 'cycle highway' concept by the
	more attention for cyclists and pedestrians;		Flemish government and the provinces
	cyclists will be able to use both directions	2014	installation of public bicycle pumps
	-		
	under specific conditions thanks to special	2014	opening elevated roundabout, the so-called
	road signs in one-way streets		balcony roundabout ("balkonrotonde")
1992	first non-obligatory roadside cycletracks	2014	introduction Blue-Bike (bike sharing) at
	("fietssuggestiestrook") in Wollestraat		the station
1993	extension (50 streets) of limited one-way	2015	first parking space for freight bicycles
	traffic in response to the circulation plan	2015	first bicycle taxis
1994	publication of a cycling map	2015	Bruges Bicycle Plan
		2015	
1994	limited extension (6 streets) of limited	2010	pilot project with cycle lane (marked with
	one-way traffic in the city centre as a result of		diamond symbol – to improve bicycle flow in
	the Fietsoverleg Brugge campaign		streets with limited one-way traffic) in
1995	first cycle route through the city centre		the Hoogstraat
	(Kruispoort – Bloedput)	2016	first bicycle streets in Bruges
1995	construction of a pedestrian and cycle tunnel		(Werfstraat and Veldstraat)
	underneath the Koning Albert-laan		· /

- 2016 opening bicycle parking at the Market Square (off street)
- 2017 first advisory cycle lanes (Vossensteert) in a borrough
- 2017 tunnel for cyclists and pedestrians under the Koning Albert I-laan (on the Sint-Michiels side)
- 2017 first footrests for cyclists at the Guido Gezellelaan x Smedenstraat intersection
- 2017 the Belgian consumer organisation Test Aankoop and the Flemish newspaper De Standaard declare Bruges as the ultimate bicycle city in Flanders
- 2017 new bicycle bridge (Jonckheere bicycle bridge) over the Ghent-Ostend canal
- 2018 opening 2nd bicycle parking at the Zand (off street)
- 2018 approval vision paper on cycle motorway F31 Bruges-Zeebrugge
- 2018 opening of Passantenbrugjes (Boeveriepoort) with first bicycle counter
- 2019 start study of coastal bicycle motorway F34 (Ostend – Zeebrugge)
- 2020 bicycle parking at the station expands to 6,000 places
- 2020 presentation of a strategic cycling study FR30 ("stadsfietsroute") introducing a cycle network 2.0

2.5.2 Reflection: how Bruges became the cycling city of Flanders

1950S – 1970S: LONG LIVE THE POST PRINCIPLE

The bicycle took a bumpy road as a means of transport. At the beginning it was just a luxury toy for rich enthusiasts. After the First World War, bicycles became common and very popular as a means of transport in our flat regions. [...] During the economic boom in the 1950s, the car became the ultimate status symbol that redesigned public space. No attention was paid to cyclists, only a feeling of contempt. Playing children or people who couldn't afford a car used bikes. And they were getting in the way!

Leroy et al, 2015, Vooruit met de Fiets! – The cycling movement in Flanders and Brussels

Like elsewhere in Flanders, cycling in the 1950s and 1960s was treated as the weakest pupil in the traffic classroom. Blinded by the belief in progress, cyclists had to make way for King Car. This is also the case in Bruges, where the POST era (mobility principle that focuses first on cars, then public transport, then pedestrians and finally cyclists) seems to have begun. Even pedestrians were in a better position. In 1974, cyclists had e.g. to step off the bike at the Smedenpoort. The following police order (22/10/1974) makes it clear:

It is necessary to no longer allow cyclists to cycle through to the Smedenpoort coming from the

direction of Sint-Andries in order to make the traffic flow at the traffic lights smoother.

The Structure Plan (1972) only takes a very narrow view of the matter as well. The citizens' summary is as follows:

Traffic covers two equally important elements: pedestrians and cars. A good traffic model reduces the conflict between pedestrians and cars.

However, the Structure Plan does acknowledge the great potential of bicycles in the compact city centre:

Experience has shown that travelling in the city centre is usually faster by bike than by car. Both the limited diameter of the city centre and the street pattern are conducive to put bicycles to good use. Bicycles cause less traffic disruptions in terms of speed and noise. Replacing cars with bikes would change the cityscape in a positive way and would create a calmer atmosphere.

For experimental purposes, an exception could be made for cycling in one-way streets to encourage greater bicycle use in the city centre.

The idea of 'limited one-way traffic' (in which case contra-flow cycling is allowed) is launched in the city centre. But the hopes of many cyclists in Bruges are quickly smashed when higher authorities give a negative advice. Nothing changes. On the contrary: after the implementation of the first circulation plan (1978), cyclists have to follow the new loops that cars also have to follow.

Nowadays cyclists have to be cyclo-cross riders in Bruges: first you have to cycle for a bit and then walk again. Cyclists have to take major detours. Het Volk, 05/06/1978

The question arises whether the city council truly defended limited one-way traffic. Whether the national government's negative opinion was pre-arranged. Whether the phrase in the Structure Plan was more than only paid lip service. The police certainly does not regret the strong no and even argues that cyclists need to be educated (accordingly to the then prevailing view and the analysis by the higher authorities).

Higher authorities reprimand the city council to allow two-way cycling in all streets, referring to "the expected undisciplined behaviour of cyclists that would immediately cause a real danger on the road". Het Laatste Nieuws, 1/03/1978

Lastige Bruggeling: [...] There was surely enough space to create a cycle path [in the Vlamingstraat and Smedenstraat] but instead they chose to construct parking spaces. [Police commissioner] Debree: Car drivers have to adjust to the speed of cyclists but cyclists do not have the courage and car drivers have no respect. [...]

Road users are masochistic. They know things can be better but prefer to do things differently. It would be the same with cycle paths. Cyclists choose the easiest route, they do not care about those cycle paths.

LB: Unless Bruges gives priority to cyclists?

Debree: As a whole? Then you have to turn the entire traffic policy and concept of inner-city traffic on its head. Think about it: then you base everything on those few moments – so many minutes before eight o'clock and a short period after 4 o'clock – and that's it. There are cyclists during the day but not enough to revolve the whole concept around them.

Police commissioner De Bree defends the choices in De Lastige Bruggeling (1981, vol. 7, issue 7)

1980S: BRUGES' CYCLISTS ARE MAKING THEMSELVES HEARD

A circulation plan, the reconstruction of cobblestone streets ... cyclists seem to pay the price in the city centre. Cyclists in Bruges neither feel welcome in the borroughs. Cycling infrastructure is scarce and often limited to a few white stripes of paint on an overdimensioned road. Cyclists feel very vulnerable at intersections.

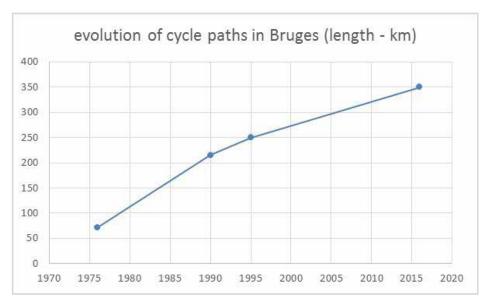
Inspired by the Dutch cycling movement, the call for a cycling policy grows stronger, among others from the illustrious music centre Cactus and the Lastige Bruggeling. The Bruges Green Cyclists, the Bruges Interest Group for Cyclists and the cyclist union Fietsoverleg Brugge (later Fietsersbond Brugge) become involved. Playful actions such as rattling tours and fietselingen show that cyclists in Bruges are not so lonely after all.

Let us first have a look at why one-way traffic was implemented. For the following reasons: to improve the traffic flow, to promote parking facilities, to limit through-traffic, too narrow streets ... These reasons usually concern a "car situation". Cyclists never cause these problems but they end up being the first victim of the "solution". Brugse Belangengroep voor Fietsers in: Brugsch Handelsblad, 31/01/1986

Under the motto 'Brugge Fietsstad' (Bruges Cycling City), the movement advocates for a propper cycling policy. The city council does not remain indifferent and makes plans, although the initiatives that follow show that cyclists continue to play second fiddle and that the POST principle still prevails. The emphasis is on tourist and recreational bicycle traffic, demonstrated by the opening of the Kerkebeek path (for which the Kerkebeek literally goes underground). Juicy detail: it is once again the Green Department taking the lead for the Kerkebeek path, just as in 1911 with the Dienst der Wandelingen (precursor of the Green Department). The Road Administration deals with real road management ... that is what cyclists read between the lines.

1990S - PRESENT: TOWARDS A FULLY-FLEDGED BRUGES CYCLING POLICY

In response to the growing criticism, the city council commissioned the Group Planning to draw up a Traffic Liveability Plan. The firm presented its work in 1990, in which the third sub-report focuses on bicycle traffic (and measures for people with disabilities). The report is rather descriptive and identifies bicycle flows and bottlenecks. The focus point is "the further development and completion of safe, comfortable and short cycle routes [...]" and therefore promotes the realisation of an area-wide cycle path network. In 1992, this will be translated into the first Bicycle Map of Bruges. This network is in fact realised over several completing the network in 2010. Cyclists demands are also answered in the city centre (albeit gradually) thanks to the implementation of limited one-way traffic.



source: De Lastige Bruggeling (1976), Traffic Liveability Plan (1990), Annual Report (1995) and FietsFacts (2016) (own editing)

Not only the number of cycle paths increases but also the quality of cycle paths. This is certainly also the result of the higher policy level. The regionalisation of the competence 'mobility' brings a wind of change. The STOP principle is stipulated by decree. A Cycling Facilities Manual (2002) sets the bar high. Elevated or separated cycle paths become the norm, depending on the speed limit. Add to this prestigious investments in architectural artworks such as the Conzett bridge (2002) and that is how Bruges becomes a real cycling city. For the city council this is the signal to adopt the slogan 'Bruges Cycling City' (originally an appeal and even a reprimand from civil society) via a big city marketing campaign (2007).

Even though the local cycle path network is completed, the ambitions have not been tempered. On the contrary. The creation of the Bicycle Master Plan for the port of Zeebrugge and surroundings (2010) broadens the horizon. Even a Bicycle Plan follows in 2015.

The plan sets out key aspects to make our city more bicycle-friendly. We want to measurably increase the bicycle use in Bruges. Bicycle comfort should be improved so that even more inhabitants can travel by bike as a standard means of transport. Safety and cycling comfort are therefore key. Fietsplan, 2015

The discourse of the bicycle policy no longer 'only' refers to the layout of cycle paths. More attention is paid to bicycle parking, especially in the historical city centre. Residents are introduced to bicycle drums and visitors to underground bicycle parking (the Zand Square, 2012 and Market Square, 2016). The city council strongly commits to accompanying measures: bicycle pumps (2014) and footrests for cyclists (2017) appear in the streets.

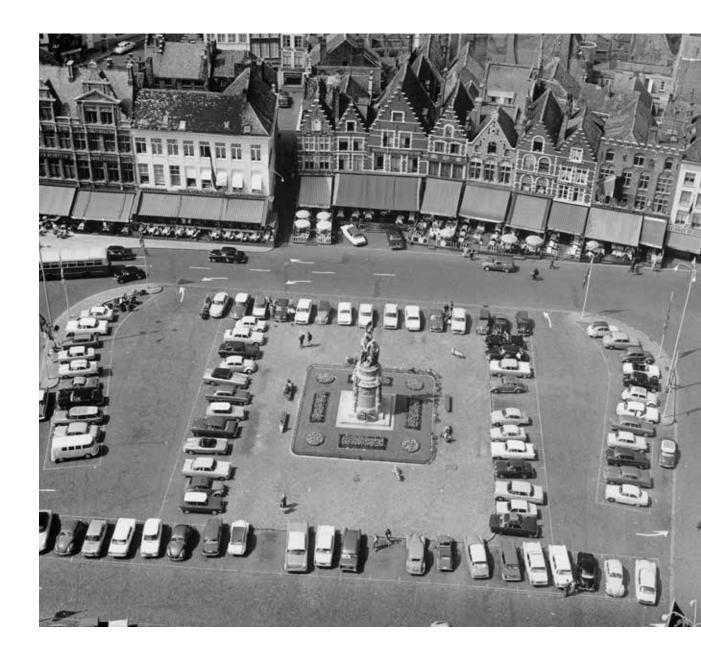
The higher government authorities do not sit idle either and launches the concept of 'cycling highways'in 2014. In Bruges, the vision for the F31 (between Bruges and Zeebrugge) gets the priority, followed by the F34 (between Ostend and Zeebrugge). In 2019, the city council additionally launches (thanks to the EU Handshake-project) the idea of a bicycle ring road (working title FR30). And how radically pedelecs, with cycling distances within a range of 15 km come inhandy (instead of a range of 5 km for classic cyclists), will redefine the mobility landscape remains to be seen. The story of Bruges as a cycling city is not over yet.

2.6 Canals and bridges

2.6.1 Time series

1963	first agreements with the (former) Bridges and Roads Administration on
	operating the bridges (it was determined that the traffic situation had to be
	normal before a bridge could be opened a second time and that a bridge could
	be in an open position for a maximum of 10 minutes)
	A report by our police officer [] shows that on 10 June 1965, the
	Gentpoort bridge was open for 17 minutes, from 17:55 to 18:12. [] The
	traffic jam reached as far as the Rozenhoedkaai. The officer asked the
	bridge keeper to wait until the traffic situation was normal before
	opening the bridge again. The bridge keeper disobeyed to this request
	and at 18:15 the bridge was once again in an open position until 18:21.
	internal note from the chief commissioner to the burgomaster, 1965
1965	city council approves the plan to fill in the Coupure canal
	We are of the opinion that the Coupure – Predikherenrei waterway is no
	longer important to the shipping industry and that it is desired to fill in
	the inner canal [] in order to construct a wide avenue with an access
	road and suitable parking facilities. [in concrete terms, the plan provides
	32 parking spaces for cars and 44 parking spaces for tourist coaches] City council meeting 30 July 1965
1972	city council decision "against upgrading the Bruges canal following the ring
17/2	('ringvaart') for ships with a cargo of up to 2000 tonnes"
1972	the Structure Plan proposes, in line with the elaboration of the Guidelines – the
17/2	preparation of the regional plans ('gewestplannen'), the urban-regional idea for a
	new inland waterway connection for Zeebrugge
	The alternative is to increase the capacity flow of the canal between
	Merendree and Heist to 2,000 tonnes and to divert this canal to the
	Boudewijn canal (Bruges-Zeebrugge).
	Brugge, 1974, vol. 10 issue 39
1973	start of the sanitation project of the "reien"-canals in the historical city centre
	(till 1983, total investment of 1,5 billion Belgian francs)
1981	new Dampoort bridge
1982	new mechanised Gentpoort-bridge to replace the manually operated
	drawbridge, introducing a lane adjacent to the gate; the plan to fill in the
	Coupure canal (with a new bridge over the ring canal) disappears from the stage
1982	new Warande bridge
1992	no longer two-way traffic on the Kruispoort bridges: one bridge for inbound
	traffic and one bridge for outbound traffic
1992	ideas are considered within the scope of the 'Brugge Ademt' action plan, for
	example, to implement curfews (7:45 – 8:30, 11:45 – 12:30, 15:45 – 17:45), to respect
	the 15-minute time window between the opening of bridges, to group ships
	even more, [however, it is unclear whether these agreements were in fact
	implemented, author's note]
1994	new Katelijnepoort bridge
	2 pedestrian bridges at the Buffel bridge
1994	
1996	argument Noorderkanaal erupts again
2001	Socio-Economical Impact Study (MaIS, 'Maatschappelijke ImpactStudie') on a
	better inland waterway-connection of the port of Zeebrugge
2002	cycling bridge over the Coupure canal (Conzett bridge) – part of the Brugge
	2002-project (European Cultural Capital)
2004	new agreements on operating the bridges (introduction of curfews at rush hour
	and agreements to group ('convoy') ships)
2006	traffic management system study
2008	start of the first short se shipping-connection between Zeebrugge and
	Meerhout

- 2011 dynamic signs that indicate when and which bridge(s) are open
- 2011 new Scheepsdale bridge
- 2012 bridges for pedestrians adjacent to the historical Smedenpoort
- 2013 increase of protests against problems with operating the bridges ('bridge misery')
- 2013 new agreement on curfews between the Waterwegen en Zeekanaal agency (nowadays 'Vlaamse Waterweg') and the city council, introduced in 2014 and (after evaluation) finally adopted in 2016
- 2014 start of the Stadsvaart project (studying the ring canal around Bruges) The Stadsvaart project has a dual objective: to improve traffic on water and on roads. But in order to make this canal navigable for ships that are 110 metres long and over 11 metres wide, the ring canal will have to be redesigned. Parts of the ramparts or ring road will have to make way for the new canal and almost all bridges will have to be adapted. Het Nieuwsblad, 16/09/2015
- 2016 one of the Kruispoort bridges is defective
- 2018 temporary Kruispoort bridge
- 2019 renovation of Canada bridge, including replacement of the 2 existing bicycle and pedestrian bridges with a (then the world's longest) composite bridge



2.6.2 Reflection: how Bruges struggles with water

Water made the city flourish and defined the region's landscape but it is not always evident to have water running through the middle of the city. Mobility needs change, even on our waterways. Brugs Handelsblad, 04/10/2019

You can't say Bruges without saying water and water transport. Paradoxically, it is around the historic centre where a bottleneck occurs nowadays. The canal adjacent to the ring road only meets the dimensions for class IV vessels (1,350 tonnes), while nowadays class Va vessels (up to 3,000 tonnes) are the standard. It is an ongoing saga because as a result, the opening up of the seaport of Bruges via the inland waterways has a marginal modal share. The debate on a new North Canal, embedded on the Leopold and Schipdonk Canal, has been unresolved for 50 years, as long as the debate on a circular canal. Whether the widening of the ring canal can or even should happen. Whether the bridges should open more or not. The result? After 50 years, only agreements have been reached on the operation of the bridges in order to avoid the worst problems with bridges, while the widening of the circular canal (or any other possible solution) remains a very sensitive topic.

CONCLUSION: BY ROAD, WATER AND AIR

You can't say Bruges without saying Venice of the North. Although one has to admit that there are only 37 bridges in Bruges' streetscape. However, for the sake of completeness, invisible bridges that disappeared under the paving could be mentioned here as well, e.g.the Wisselbrug and the Kraanbrug. (Beernaert, 2002) Also many new bicycle bridges can now be added to the list, thanks to the Flemish government:

- 2002 construction of Conzett bridge (Coupure) as part of the ramparts cycle path
- 2009 construction of a bicycle bridge over the Expressway at Tillegemstraat
- 2012 construction of pedestrian bridges Smedenpoort
- 2012 construction of a bicycle bridge ('fork bridge') over the Expressway (N31) at the Koning Albert I-laan.
- 2013 construction of bicycle bridge Zuidervaartje
- 2017 construction of Jonckheere bicycle bridge over Ghent-Ostend canal, final part of the N31 cycle path
- 2018 construction Passanten bicycle bridge at the Boeveriepoort with bicycle counting pole
- 2019 preliminary draft of a new movable bridge for cyclists and pedestrians at Steenbrugge

- 2019 the city council launches the idea of a new landscape bridge over the R30 at the train station
- 2020 start of feasibility study for a bicycle bridge over the N31 at the Zandstraat

2.7 Participation / Information

2.7.1 Time series

1965	establishment of the Marcus Gerards Foundation in response to the absence of
1974	an ambitious policy on heritage conservation start of the city newspaper 'Lastigen Bruggeling'
1977	ambition statement to appoint an Ombudsman's Service (however no
1977	Ombudsman was recruited at that time) brochure 'Brugge Nu en Straks' with further information on the new political (city council)
1981	legislature publication of the first 'Fietskrant', a publication by Cactus '80 vzw and the Bruges Cyclists Interest Group
1983	first 'Fietseling' organised by the Bruges Cyclists Interest Group
	A 'fietseling' is a cycling event during
	which a large group of cyclists in a traffic
	pattern apply the traffic rules in a very
	strict way, causing traffic snarls.
1981	city council approves guidelins for information
	on a neighbourhood level
1981	opening of municipal information service (first
1000	in Belgium)
1982	the Traffic Liveability Working Group
	(by vzw Cactus) launches its 'Blauwdruk voor een Leefbaar Brugge' (Blueprint for a liveable
	Bruges)
1990	establishment of the cyclist union
	Fietsoverleg Brugge
1990	action 'SOS voor een Leefbaar Brugge'
	(SOS for a liveable Bruges) by heritage and
	other private organisations
1990	publication 'Witboek van een beleid –
	De inzet voor een leefbaar en levend Brugge'
	(Whitepaper – The quest for a liveable and
	vibrant Bruges) in response to the SOS action
1991	first rattling cycling tour in Bruges
1992	publication of 'Brugge, word wakker' by journalist Eric Van Hove
1992	guidelines for a transparant city's administration come into force and provide citizens of Bruges a clear framework to exercise their right of access, information and participation

- 1996 Fietsoverleg Brugge officially joins the Fietsersbond vzw (Cycling Union of Flanders)
- 1997 introduction of the Road Telephone ("wegentelefoon")
- 1998 appointment of the first Ombudsman in Bruges
- 2004 opening of Mobility Shop (a single point of contact on mobility matters at the local level) in support of the launch of the first Mobility Plan
- 2014 kick off of the participation process 'Toekomst van Brugge'
- 2019 'Buurt aan de Beurt', the new City Council visits the various neighbourhoods in Bruges

2.7.2 Reflection

ABOUT "STUBBORN CITIZENS OF BRUGES" AND A CITY COUNCIL ON ITS QUI-VIVE

The Structure Plan was the ultimate starting signal for mobility planning in Bruges. The role that the Marcus Gerards Foundation played in this cannot be overestimated. The foundation initiated the discussion on heritage policy and the vision for the historical city centre. It was time for the city council to decide ... and they did so with gusto via the Structure Plan.

The city council once again experiences the power of vocal citizens "thanks to" the city newspaper 'De Lastige Bruggeling' (which was published from 1974 till 1982).

The progressive monthly magazine focuses on files concerning land speculation, dubious relationships between city council and real estate agents, companies that threaten the health of local residents, loneliness, mass tourism that alienates residents from their own city...

'De Lastige Bruggeling' embodies the spirit of May 1968, when youth revolts turned Paris and Leuven



on its head. Four years later, this drive and energy result in the Cactus café in Bruges. At the beer tap all kinds of plans are made and volunteers are found to achieve these projects. Also the Bruges affiliate of Volkshogeschool Elcker-Ik of Antwerp finds its home base in Cactus café. During the summer of 1974, Elcker-Ik Bruges organises a trip to Amsterdam. The participants meet many progressive action groups and get acquainted with the principles and practice of civic participation. They also visit the editors of the alternative city newspaper 'De Lastige Amsterdammer', which denounces the environmental and traffic problems in Amsterdam.

source: https://www.verrijkjekijkopbrugge.be/

At the end of the 1980s, the citizens of Bruges take a critical look at the policy once again. New big hotels are – so it seems – flooding the city. Large-scale new construction projects, sloppy restorations and the demolition of historic buildings also strenghens the perception that the city council is abandoning the ideas of the Structure Plan. The construction of the Crown Plaza hotel at the Burg Square was the ultimate push. The (poster) campaign 'SOS voor een leefbaar Brugge' ('SOS for a liveable Bruges') is launched in 1990 and received wide public support since Burgomaster Van Acker is forced to advocate his policy with a 'Witboek van een beleid – De inzet voor een leefbaar en levend Brugge'. Premises from the Structure Plan are confirmed. as is the concentration model for tourism in the Golden Triangle-model. This even leads to a hotel freeze in the city centre later on.

Journalist Eric Van Hove is also concerned about the liveability of the city. He writes the pamphlet 'Brugge, word wakker'. The publication aims to shift the focus from "Bruges as postcard-scenic city to Bruges as a culture-living city", hence sowing the seed for realising a concert hall and the application for Bruges as the European Capital of Culture 2002.

It is not until the 1980s before vocal citizens get involved in mobility issues, at the same time when the uprising cycling movement denounces the absence of a cycling policy. In Sint-Michiels and Sint-Andries, action groups denounce the Expressway as a 'death trap'. At the end of the 1980s, Studies and Action Committees emerge thanks to the Catholic ACW movement. They act on new plans in their borrough, such as the redesign of the Koning Albert-laan into a 2 x 2 profile. They introduce their own proposals. Hence it is not surprising that the city council issued policy documents in the early 1990s such as the Traffic Liveability Plan (1990) and the action plan 'Hart voor Brugge' (1992).

FOCUS: THE EARLY DAYS OF THE BRUGES' CYCLING MOVEMENT

- 1981 the first 'Fietskrant' (a publication of Cactus '80 vzw and the Bruges Cyclists Interest Group)
- 1983 first 'Fietseling' organised by the Bruges Cyclists Interest Group
- 1982 the Traffic Liveability Working Group (by vzw Cactus) launches its 'Blauwdruk voor een Leefbaar Brugge'

The working group was founded about eighteen months earlier, from the concern of the situation of cyclists in traffic. As a result of a training cycle organised by the working group in cooperation with the Volkshogeschool, it gradually became clear that it made no longer sense to handle problems that cyclists face separately from general traffic problems. There was a growing desire to put forward a coherent set of proposals. Admittedly, we also wanted to be respected and wanted to show that a group of ordinary civilians can have a useful input. Bonneure et al. 1982

- 1986 establishment of cyclist union Fietsoverleg Vlaanderen (later Fietsersbond vzw) at the regional level
- 1990 establishment of Fietsoverleg Brugge (at the first meeting it was called 'Zwakke Weggebruiker' – 'the weak road user')
- 1990 first Fietseling event in Bruges under the motto 'Voor een fietsvriendelijker verkeersbeleid'; 1,200 participants including Minister Sauwens are present and demand safe, smooth and comfortable bicycle traffic and less car traffic, the slogan 'Brugge Fietsstad' ('Bruges Cycling City') is launched as an appeal to the city council to turn the city of Bruges into a real cycling city
- 1990 publication of the first fietskrant (until 1997) by Fietsoverleg Brugge

At the beginning of this year, about 8 people gathered together on the initiative of the Volkshogeschool. They decided to join force in advocating the ever-growing dissatisfaction of cyclists. They did so by establishing a cycling association: an independent member organisation for conscious cyclists. [...] The focus is on a signalling function rather than to do research since that is the job for traffic experts. [...] Fietsoverleg Brugge wants that cyclists and pedestrians become the starting point for traffic policies.

Fietskrant, vol. 1, issue 1, 1990

- 1991 first rattling tour in Bruges
- 1991 second Fietseling in Bruges 'Vlugger met de fiets', with the argument to adapt the road surface in favour of bicycle traffic, to implement limited one-way traffic, to design clearly defined continuous and signposted bicycle paths.
- 1992 third Fietseling, 'Vrijer op de fiets Veiliger fietsen in Groot-Brugge'
- 1993 fourth Fietseling, 'In de ban van de ring' with, among other things, the demand for a safe and comfortable cycle path along the entire ring road, safe and comfortable layout of intersections, complete realisation of an inner ring road for cyclists
- 1994 fifth Fietseling in Bruges 'De stem van de fietser' (referring to the upcoming local elections)
- 1995 establishment of the Fietsersbond vzw (Cyclist Union) at the regional level
- 1996 Fietsoverleg Brugge officially joins the Fietsersbond vzw
- 1997 sixth Fietseling in Bruges, 'Mag het ietsje meer zijn', including the demand to implement 30 km/h zones in all residential areas, the demand for a real cycling policy (including a city official in charge of cycling), the demand for a cycling route for each main (car)road
- 1997 the city council launches the slogan 'Brugge Fietsstad' hence claiming that the city is a cycling city
- 1998 Test Aankoop declares Bruges and Hasselt as 'cycling cities of the year'.



To this day, the citizens of Bruges speak out frankly and passiontly. Even though the forum shifted towards social media and the presence of most action groups faded in the 2000s, the idea of a bottom-up approach is definitely still alive among the citizens and the local government. For example, the Mobility Plan (2016) was preceded by an ambitious participation process. And with the appointment of Burgomaster De fauw, the new city council visits the different neighbourhoods in Bruges under the motto 'Buurt aan de Beurt'.

When having a closer look at the texts of these vocal citizens ('lastige Bruggelingen' in dialect), the love for the city, their neighbourhood and their street is very noticeable, apart from the (constructive) criticism on the policy. As the Bruges singer Benny Scott sang: "'k en Brugge in m'n erte, de schonste stad van 't land [...] M'n Brugge is 'n droombild uut duuzend en één nacht". (I have Bruges in my heart, the country's most beautiful city [...] My Bruges is a dreamscape out of thousand and one night) Criticism is never unfounded nor "gratuit" and always in the spirit of the medieval merchant family Gruuthuse who used 'plus est en vous' as their motto. The best is yet to come. The bar must be set higher.

After all, being a citizen of Bruges is more a matter of birth, dialect or sense of humour. It is a state of mind, a way of thinking and living that makes people – whether or not being born in Bruges – feel at home in this city, to be spiritually in harmony

with the environment, and to consider it their hometown.

Andries Vandenabeele, founder of the Marcus Gerards Foundation and later alderman, Burgerwelzijn, 27/11/1980

To this day, citizens of Bruges are characterised as:

- steady and determined
- self-assured without getting intrusive
- hard-working yet with a sense of humour
 - respectful but not submissive
 Caestecker & Keppler, 1983, Brugge: straten en pleinen

FROM INFORMATION TO PARTICIPATION, HOW THE CITY COUNCIL CLIMBED THE PARTICIPATION LADDER

By trial and error, the Bruges city council learned there was a need for a participatory policy. The citizens of Bruges may help to determine the course but it was the city council that set the pace.

While browsing through archive documents, it is noteworthy how the concept of 'participation' has evolved over the past 50 years.

A plan can grow with the effective cooperation of private users. Participation consists of two parties and two directions. From public to private and from private to public. [...] Participation is not possible



without the government clearly setting out the options and insights in a plan. On the other hand, it is not very desirable that individuals, who have to implement part of the plan, are not informed on the government's insights.

Structure Plan, 1972

In the 1970s, participation meant the provision of information. It was reserved to participation boards, that were constrained due to a high level of pillarisation [a typical Belgian phenomenom in which the main polical fractions also have their own health/union/ educational/... institutions].

Philosophical, religious, cultural, social and other organisations have been involved in participatory structures for many years. The various people in charge (priests, teachers, youth monitors, cultural workers) know the residents and their needs. Therefore, they make excellent spontaneous channels of participation. Structure Plan. 1972

The entire CVP team which is strongly in control of this city and handles things 'the Bruges way'. An absolute majority, no form of participation, no criticism either: The Leaders know what their people need.

De Lastige Bruggeling, 1982, vol. 7, issue 9 & 10

[Reflection on the Traffic Commission] A rather heterogeneous group are part of the Traffic Commission. There are representatives of the various political parties, commercial circles, people of the third age, people with technical competencies such as the police commissioner, a public transport representative, a police judge and a lawyer.

De Lastigen Bruggeling, 1976, vol. 3, issue 3

After the tumultuous election campaign of 1976 (during which the Lastige Bruggeling questioned the policy discourse on several occasions), the new city council want to be more transparent by publishing 'Brugge Nu en Straks' (1977) explaining its ambitions for the next years :

Wanting to govern a city overnight would be absurd. More than anywhere else, a plan or goal is needed. After all, the prosperity and interests of the entire community are at stake here.

The city council is pleased to have reformed the advisory councils, to have announced an Ombudsman's Service (1977, although it would take until 1998 before an Ombudsman was appointed) and to have created an urban information service (1981). Participation is hence being institutionalised at the end of the 1970s. However, critical citizens who are hoping for participation or even co-creation have the feeling of being left outside. The analysis in the last edition of de Lastige Bruggeling speaks for itself:

So it is time to evaluate [in the last issue of De Lastige Bruggeling, author's note]. The great ideas of the sixties have not disappeared, they have been encapsulated, have reinforced the existing stronghold. Participation? We now have an information officer for that. Environment? A municipal ecologist, my boy. Isn't that unique for Belgium? What more do you want? And so you are left with a feeling of unease. Plain powerlessness. De Lastige Bruggeling, 1982, vol. 7, issue 9 & 10

It is therefore not surprisingly that many local action groups are popping up in the 1980s. In 1990, Group Planning counted no less than 31 traffic groups during the public consultation on the Traffic Liveability Plan.

Since a decision was already taken before the start of the public inquiry, the current system of appeals cannot be classified under participation. [...] In most cases, where nowadays so-called participation moments are provided, this concerns a procedure after decision: real changes are no longer possible. Bonneure et al, 1982, Voor een verkeersleefbaar Brugge

But we meet an rigid professional who has to rely on rational politics, all the rest is wishful thinking. No time for small talk, to shake hands, [...] Keep on working, 10 hours a day. In an office with a messenger and an official car with private chauffeur: far removed from the ordinary people. Socialism without the public? [...] Van Acker also ignores action groups and new social movements that are emerging.

De Lastige Bruggeling, 1982, vol. 7, issue 9 & 10

The city council does not remain indifferent to this criticism. The launch of the Traffic Liveability Plan (1990) and the action plan 'Hart voor Brugge' (1992) is accompanied by information meetings, announced by the city council as 'voorlichtingsvergaderingen'. A touring exhibition is shown in the various borroughs. The action plan, which announces a new circulation plan and bus plan, also includes a comprehensive communication campaign. Here, too, information was provided in the name of 'participation'. Burgomaster Frank Van Acker (who passed away unexpectedly in 1992 and was succeeded by Fernand Bourdon) put it this way:

Involvement of citizens in policy-making is actually a better description instead of the meaningless word 'participation' and this is a phenomenon that needs to be approached from different angles. Firstly, policymakers stand up for openness against prejudice. [...] It is simply logical that there is openness at a municipal level [...].

Frank Van Acker, quote from: Frank Van Acker, 1993, Hovart & D'Hondt

It is no surprise that the appointment of Burgomaster Moenaert in 1995 introduced a policy shift. Being a wellknown figure in the ACW movement who e.g. took an active stand against the upgrading of the Koning Albert-laan, he is not indifferent to criticism. Politicians are committed to follow a more open approach, hence also expressing more accountability. The realisation of the first Mobility Plan illustrates this: a task force draws up a comprehensive participation process and also sets up several consultation meetings including five hearings using the slogan 'Brugge Ademt' ('Bruges is breathing (again)'), including a theme section in the new city magazine Bruggespra@k. The plan is also adjusted based on the feedback. For example, the time restrictions in the blue zones are loosened up from the initial two hours to four hours. After final approval, the city also provides information tailor-made to individual citizens by means of a Mobility Shop.

Especially the meeting for the city centre was very turbulent. In a 'sold out' Biekorf – with more than 300 attendees – [...] the speakers came under heavy criticism by the attendees who asked questions mainly related to residential parking and the blue zone in the city centre. Despite the presence of an interpreter for deaf people and people with a

hearing impairment, the debate sometimes seemed to be a dialogue of the deaf.

annual report 2003, Bruges city council

Gradually, there were more opportunities for participation and even co-production. For example, initiatives such as 'De Toekomst van Brugge' (2014) and 'Buurt aan de Beurt' (2018) provided fresh new policy ideas which the city administration further studied and even developed. When working on a new mobility plan, four public participation meetings were organized in 2014, where more than 3,000 ideas were collected. In 2015, four information markets followed where 1,500 citizens became acquainted with the draft plan. Many comments were included in the final Mobility Plan (2016). The participation process not only allows citizens to have a say and contribute to the proposed solutions, but also involves them in the problem analysis from the outset. Or how citizens in other words become involved in the integral problem-solving process inherent to mobility research.

To summarize. The Bruges (mobility) policy tells the story of the participation ladder. How participation was initially narrowed down to just providing information (until the early 1990s). How later on citizens were consulted and even allowed to advise on plans. Taking in regards the most recent initiatives, there now even seems to be a window of opportunity for coproduction.



THE TENSION BETWEEN INDIVIDUAL VERSUS PUBLIC INTEREST

The expression 'the citizen is a customer' primarily means that the municipal policy is at the service of the 'citizen'. Traffic policy is no exception to this rule. 'The citizen is the customer' is not the same as 'the customer is king'. The policy is not intended to serve individual interests.

Zuallaert et al, 1993

The archives also show that there can be a thin line between service and participation. It does not even have to be as crystal clear as the 1974 scandal exposed by De Lastige Bruggeling concerning the realisation of the Expressway (see 2.11.3). It can also be more subtle. Policymakers are extremely aware of this.

Although participation does not necessarily mean to give in to every possible desire of the people, an appropriate decision can only be taken when all interested parties have been truly heard. (former) municipal councillor Patrick Moenaert in a CVP manifesto on traffic, 1988

I have already learned a very important lesson from this traffic debate and the many to come, namely not to yield to any pressure or criticism, especially if you are convinced that the carefully devised measures are the best possible. Can anyone imagine that it would still be allowed to park at the Market Square? Moenaert, 2012, 100% voor Brugge

This balancing is even more difficult during dialogues with interest groups. They often originate from a specific perspective and represent 'only' residents or traders and their interests. Interests that can be directly opposed to a public interest (if such a thing already exists?). The art of participation is to create a real dialogue. One in which both the government and interest groups gain insight into problems and thus achieve broad support for measures. As – former – deputy (and nowadays Burgomaster) Dirk De Fauw stated at a meeting in the early 2000s: "Involvement without insight leads to verdicts without prospects" (Dutch boutade: "inspraak zonder uitzicht leidt tot uitspraken zonder uitzicht").

Action groups are an enrichment of democracy. [...] It is also not uncommon for action groups to emerge among people who are directly affected by one specific problem. Initially, they act out of self-interest but after some time the sum of this self-interest grows into a public interest.

Patrick Moenaert, chairman CVP youth, Brugsch Handelsblad 31/08/1979

The views of the Bruges merchants and their interest groups on creating a more lowtraffic city centre illustrate this thesis perfectly. Somewhat put in a black/white caricature: a debate on a balanced liveability city with merchants (reasoning that they neer their customers and hence teir cars) and one with fewer cars (and more street liveability).

MERCHANTS AND THE BRUGES MOBILITY PLANNING: ACTIONS (ULTIMATELY) SPEAK LOUDER THAN WORDS

With the implementation of the first circulation plan (1978), 200 merchants in Bruges protested in front of the city hall, fearing that their shops won't be accessible anymore to their customers ... who would then go shopping elsewhere. Merchants were also not in favour of the construction of underground car parks.

There is no need for so many new parking spaces [at the Zand Square]. Certainly not underground.

E. Lowyck, chairman of trade circuit the Zand

The evaluation of the circulation plan in 1979 was rather negative:

So in summary, we can conclude that the traffic intensity varies from street to street, although half of the traders do not experience any change in traffic volume. 42% of self-employed workers in Bruges are not affected by the new traffic plan in terms of revenue. However, 41% do experience adverse effects. 71% of customers find the changes to be unpleasant. 62% of self-employed workers propose some kind of change: 38% are in favour of traffic-free streets, 42% are against it. survey NCMV (later Unizo) & Verenigde Handelsgebuurtekringen

The press reported this as follows (which immediately proves that the so called fourth power plays a crucial role):

[The circulation plan] caused an increase and decrease in customer flows in many streets. This of course aggravated the shop-owners who suffered a loss of revenue as a result.

Burgerwelzijn, 14/06/1979

One can conclude that the plan left a rather negative mark being reinforced by the press, although this certainly was not unanimous. Some merchants quickly saw the advangtages and stated that a low-traffic car centre would be an asset. For example in 1979, the merchant organisation 't Beertje advocates for more greenery and therefore agrees with the city council's discourse:

[...] Unfortunately, these valuable squares are now mostly reduced to mundane parking spaces and as a result, valuable façades or small remarkable monuments do not reach their full potential, something that means a great deal in an art city like Bruges.

Burgerwelzijn, 31/05/1979

Also in 1992, when the second circulation plan was implemented, there could also two different voices to be heard.

VEZO, a lobby group, surveyed approximately 70 self-employed people from the disadvantaged city district on the Bruges traffic plan. It seems that a revenue decline of 30 to 40% is not an isolated case. The affected merchants consider moving or leaving their business if the situation changes. Het Nieuwsblad, 27/08/1992 That some merchants achieve the opposite effect by trumpeting that it so annoying to drive in Bruges? That is correct, one should be wiser. First of all, what they are proclaiming is wrong, and it is a wrong strategy anyway. These 'loud voices' do not offer any real alternative; on the contrary. They want to go back to how it was before. But if there is one thing everyone agrees on, it is that the former traffic situation in Bruges was completely unsustainable.

18/12/1992, R. De Buyseren on behalf of the Verenigde Handelsgebuurtekringen (Union of Trade Circuits), in: Brugsch Handelsblad

The city council is not indifferent to the merchants' concerns and introduces in 1993 the promotional campaign 'Brugge Winkelstad' ('Bruges shopping city'), linked to an expansion of the car park at the Zand (not without any protesting first) and at the station.

However, the merchants' protesting does not disappear at once. The different views between merchants was put on full alert in 1995 when the association 'Tevreden Handelaars' ('happy merchants') was founded.

Especially the negative response via the local TV station 'Focus' of Hubert Vanrafelgem, chairman of the Bruges Trade Centre, was the final straw because he once again made it look as if Bruges were a "doomed city" where shopping is as good as useless. [...] Let's at least try to be as positive as possible. We say "no" to all kinds of actions that harm the shopkeepers in our city even more. Everyone is welcome in Bruges and we have the shopping and parking facilities!" Brugsch Handelsblad, 17/02/1995

This analysis stating that merchants would score an own-goal is supported by the NCMV in 1997.

Bruges has to get rid of its negative image. Unfortunately, even traders claim that accessibility is an issue. [...] [We have to provide] a real quality of life in the city, in which there is also room for small-scale street entertainment. Green facilities and street furniture should make the public domain more attractive. Brugsch Handelsblad, 12/12/1997

A more nuanced discourse gains acceptance. In 2014, Unizo Brugge even supports the idea of expanding the pedestrian area, albeit with some nuances.

A Unizo survey for all its members in the Bruges city centre shows that the selfemployed people are in fact in favour of the temporary closure of shopping streets for car access. But not without several strict conditions. The city needs to communicate their plans much clearer and each street should be viewed case by case. Consumers are not willing to carry a large television or floor lamp for hundreds of metres to an underground car park for example. Nieuwsblad, 08/01/2014 The story illustrates that time can be an ally for introducing new policies. Not only for merchants but also for the citizens of Bruges. As shown in surveys by the Brugsch Handelsblad

- in 1983:

Should a parking ban be implemented at the Market Square, meaning that drivers are still allowed to pass through but no longer allowed to park? Yes 47 % -No 45.9 % - No opinion 7.1 %

- in 1984

More and more shopping streets in the city centre are redesigned. Do you approve of the (more or less) same pattern that is being used every time? Yes, 63.5% - No 36.5%

- in 1996

The majority of shopping enthusiasts (86%) are in favour of promoting shopping in the city centre by making the shopping streets low-traffic. They realise that parking in front of their favourite shop is an illusion. [...] Some aspects of making some shopping streets in the city centre car-free need to be nuanced: 17% of the interviewees want the streets to be completely car-free, 28% partly car-free, 29% are in favour of car-free streets during weekends, 6% are in favour of car-free streets during the whole week and 20% say only around noon.

This also proves the strength of the Structure Plan, which (from a common view on traffic education and a pragmatic angle) promotes a transitional scheme. And not only for circulation in the city centre, but also in regards to implementing a parking policy:

It is currently not possible to opt for the saturation scheme or the optimal scheme. Car users still have the "the closer the better" mentality with all the saturation consequences. Public transport is also inadequate. Therefore, a scheme was presented that could meet the immediate parking shortage in the city centre.

Structure Plan, 1972

The parking history (see below) shows that the public support for parking gradually grew there as well, first for the blue zone and then for paid parking as the norm in the city centre. However, a reconstruction of the parking plan (2017) shows that the city council struggled just as much with the issue of public versus individual interest. Under public pressure, the number of parking permits residents had to apply for increased from three to four, residents received not 30 but 90 visitor codes, the employee rate was reduced from 5 to 3 euros and employees in the blue zone do not have to display a parking disc and can instead apply for a free digital parking permit.

THEORETICAL CONCLUSION: MOBILITY PROBLEMS AS SOCIAL DILEMMAS

If there is one common dominator in this chapter, then this is that mobility problems cannot be regarded separately from their social context. Mobility issues are 'social dilemmas', characterised by three properties:

- there are actors who mutually depend on achieving their own individual interests and on achieving the pursuit of the general policy;
- 2) the social dilemmas are characterised by a contradiction between individual and public interests;
- the pursuit of only individual interests would lead to a public tragedy.
 Driessen and Leroy, 2007

2.8 Organisation

[author's note: due to limited data sets, the focus here is only on the period prior to the foundation of the Department of Mobility].

2.8.1 Time series

- 1911 establishment of 'Dienst der Wandelingen' ('Department of Promenades') as a predecessor of the Green Department (now integrated into the Public Domain cluster)
- 1971 establishment of coordination department
- 1981 installation of the first computer for 'a more efficient fight against crime by the police force'
- 1981 acquisition speedometer by the police
- 1982 establishment of a traffic department within the police force
- 1983 establishment of the advisory board on traffic management
- 1986 introduction of the specialised unit for 'traffic signage' (who is going in dialogue with private contractors who temporary occupy the public domain)
- 1994 introduction of Prevention Unit (action within the Security Contract with the national government) with a threefold task: drug and alcohol prevention, prevention of bicycle and moped theft and community work
- 2002 appointment of a prevention officer for road safety within the police force's traffic department
- 2004 establishment of the Mobility Unit, later the Department of Mobility

2.8.2 Reflection: how the Bruges mobility policy arose without a department of Mobility

It is no coincidence that 1972 is chosen to be the starting point of this work. When the Structure Plan was presented this coincided with the presentation of a first traffic model for the city centre, marking the start of mobility planning in the Venice of the North. One can't say that there was previously no mobility policy, but a structural approach with a long-term vision was lacking until then. The mobility policy was limited to an ad hoc traffic policy and even to the elaboration of police regulations by the second Police Department, which reported to the chief of police. Action led to reaction. Circulation problems led to circulation measures. End of story.

Not that there was no expertise. A traffic officer, Roger De Bree (who later became the police commissioner) in 1972, followed closely the redaction of the Structure Plan. He did this together with public servants of the cities' administration, among others Jef Gorissen (Director of Technical Services) and Luc Constandt (Head of the Department of Heritage Conservation). Today, we would describe this as a 'transversal and multidisciplinary exercise'.

A traffic policy for general welfare cannot be implemented when only stringent factors are taken into account, such as road construction, road surfacing, public lighting [...] after all, a traffic policy in a large city is interwoven with all sorts of elements and characteristics [...] the role of the city centre, the location and distribution of traffic-generating activities, the conservation of art-historical quarters [...] There is a strong interdependence between merely traffic problems on the one hand and the urban-planning, arthistorical, socio-economic and ecological aspects on the other hand.

Roger De Bree, in: Structure Plan, 1972

It is without discussion the merit of this traffic officer – police commissioner De Bree that a mobility policy true to this ambition was further developed from the 1970s until the early 1990s. In 1992, he was named the spiritual father of the new circulation plan. The police force also establishes a traffic department in the 1980s, which handled more than 'just' the redaction of police regulations.

The task of the traffic department is to take part in all aspects of traffic (school visits – bicycle inspections – socio-cultural programmes in the afternoon or evening – traffic education, etc.) and to participate in the traffic policy (examining complaints and proposals for measures that can be submitted to city council for approval). Attending work meetings and following up road works that are carried out all over the city's territory also absorb a lot of working hours. Since the tasks within the city administration have been shifted, the traffic engineering department will in the future also be responsible for redacting police regulations on traffic. [...] The department consists of three people: one traffic officer, one police inspector and one police brigadier.

internal note, 1986, Bruges police force

There was also traffic expertise within the city services. For example, Dirk Michiels played an important part for the mobility policy for a quarter of a century. First he served as a cabinet member of Burgomaster Van Acker, later as deputy town clerk (nowadays this would be the deputy general director). He was not only involved in the drafting of almost all the major mobility dossiers, but also took initiative thanks to an extensive network. The Technical Services are also worth mentioning. even though they mainly implement the policy. The division between the Road Department and the Green Department tells a lot about the zeitgeist. A dichotomy that sometimes symbolised the struggle between a harder engineering approach and a softer approach. The embryonic cycling policy in the 1980s was initially considered a matter for the Green Department, which designed recreational cycling infrastructure. A difference in vision in the early 2000s can also be used to illustrate the dichotomy. Alderman for Public Works Jean Vandenbilcke wanted to keep his election promise which stated that "every citizen of Bruges has the right to have a decent side walk in front of his/ her house". This led to a political compromise. In 2003, pavements were often prioritised over tree planting in residential areas. Based on the policy vision "trees are less important than side walks and parking facilities", a plan was elaborated to construct a cycling path in the Engelendalelaan, which would mean that the trees along the avenue had to be cut down. Concerned citizens managed to stop this. It is only in 2019 that both departments merge into the 'Public Domain cluster' with no longer a distinction between grey and green infrastructure in the Bruges cityscape.

The Coordination Department is also definitely worth noting. It was originally founded in 1971 to facilitate the merger of Greater Bruges and then became a staff service that advises the burgomaster on his authorities. The emphasis was initially on the merger but in the 1980s and 1990s, the department works shifted more and more towards a traffic policy in the broadest sense of the word: from road safety to bicycle traffic to a parking policy. Not surprisingly that the he Coordination Department and the Head Coordinator became the driving forces behind the first Mobility Plan in 2001.

And what about a Department of Mobility? That would have to wait until 2004. After all, the agreement between the Flemish government and the city council stipulated that there should be a Department of Mobility. And that should also be the case in Bruges, the pioneer of mobility planning in Flanders. The city council decision (04/04/2003) lists the following tasks:

- the implementation of the mobility plan
- the coordination of mobility issues
- to be the point of contact for neighbouring municipalities regarding common mobility problems
- advising the city services on cases that may have a (significant) impact on the mobility system in Bruges
- monitoring all developments and new initiatives regarding mobility

The result? Even though other municipalities had an agreement to initiate a mobility policy, in Bruges this led to a certain compartmentalisation. Does this confirm Bruges' dialectics of lead (cf. Romein, 1937)? Fact is that since then a Bruges mobility plan conforms with the zeitgeist of the Mobility Decree (2009) and the Basic Accessibility Decree (2019), implementing the ideas of 'sustainable urban mobility planning' (SUMP). Although one can state that this is a step backwards from a 'city of places' policy in the CREATE framework.

In spite of this critical note on the supralocal (first national then regional) policy, we can also see at this level a positive evolution from an organisational point of view. When Bruges had 'only' Technical Departments, there were also only infrastructure managing bodies such as the Bridges and Roads Administration at the supralocal level, run according to a strict engineering logic. Add to this a classic top-down approach and this leads to the press praising an A17 commission for visiting Bruges as if it were a visit from a foreign monarch. As extensively illustrated in other policy themes, the regionalisation of national/federal competences in 1988 marked the true start of a mobility policy. The ivory tower would fall. The STOP principle would be implemented gradually. The Agency for Roads and Traffic (AWV, Dutch: Agentschap voor Wegen en Verkeer) is launched, whereas the Department of Mobility and Public Works (MOW, Dutch: Departement Mobiliteit en Openbare Werken) draws up policies and also regional mobility plans since the approval of the Basic Accessibility Decree. One can therefore state that mobility planning firstly became institutionalised at the Flemish level and that the local level - Bruges followed with a Department of Mobility ... thirty years after its first mobility plan.



2.9 Parking

2.9.1 Time series

- 1934 new national Traffic Law with the introduction of parking rules
- 1952 implementation of a complete ban on street parking in Steenstraat, Zuidzandstraat, Noordzandstraat and Geldmuntstraat as well as for other locations in the city centre, also extension of the alternating parking regime
- 1953 extended alternate-side parking (e.g. in the Ezelstraat and Oude Burg)
- 1954 implementation of alternate-side parking / ban on parking in the Wollestraat
- 1963 ban on parking at 19 intersections in the city centre
- 1965 principle of paid parking is included in the Road Code
- 1966 first blue zone in the city centre between the Zand and Market Square Whereas it is necessary to restrict the parking periods for vehicles in the city centre to allow a smoother traffic flow.

1967/1969 implementation and extension of the blue zone in the gate streets

- 1971 ban on parking at the Burg at the side of the statue
- 1972 publication Structure Plan including a calculation of the parking demand and a proposal to elaborate over time a centrifugal parking model (transitional scheme)
- 1973 implementation of a blue zone in Oude Burg and its adjacent streets
- 1975 implementation of reserved parking spaces for people with disabilities (e.g. Burg, Market Square, the Zand ...)
- 1977 implementation of first car park for residents (Westmeers)
- 1978 implementation of paid parking (the Zand, Market Square, Burg, Sint-Jansplein)
- 1978 opening of underground car park Zilverpand
- 1979 expansion of paid parking (Jan Van Eyck square, Kraanplein, Biskajersplein, Muntplein, Woensdagmarkt, Astridpark, Guido Gezelleplein, Schouwburgplein, Pandreitje and Oude Burg)

1980 study 'Key aspects of a parking policy – residential parking' (Group Planning) in which, among other things, ideas for a residential parking policy are explored.

- However, the implementation of [...] parking spaces reserved for residents and spread throughout the city centre needs a legal framework. In preparation of this statutory regulation, it is recommended to implement residential parking in two zones as an experiment.
- 1980 criticism on the cities' vehicle towing policy grows
- 1982 introduction of parking season tickets for employees (a first in Belgium)
- 1982 opening of underground car park Biekorf (200 vehicles)
- 1982 first ticket machines outside the city centre, at Gaston Roelandtsplein (Assebroek)
- 1982 opening of underground car park the Zand (800 vehicles)
- 1983 opening of underground car park Katelijnestraat
- 1983 introduction of new traffic and parking signs for the city centre
- 1983 Minister De Croo approves residential parking
- 1987 the debate on towing reaches a climax when 233 cars were towed in April; a (sarcastic) poster campaign 'Bezoek Bruggge' ('visit Bruges') is launched by some unsatisfied citizens, followed by a heated debate in the city council
- 1992 the Inner City Traffic Plan comes into force, which also means the extension of paid parking
- illuminated signs for underground car parks ('full'/'spaces')
- 1993 ticket machines are now equipped with magnetic card readers
- 1993 extended maximum permitted parking duration for paid traffic in the city centre (from 2 to 5 hours)
- 1993 expansion of car park the Zand (from 800 to 1,200 spaces)
- 1994 implementation of a double parking fee (after this system was legally anchored by Royal Decree 18/9/1991) hence introducing a strong parking enforcement mechanisme

- 1994 introduction of residential parking in West Bruges and Sint-Gillis
- 1994 opening car park at the train station "as the showpiece of an integrated parking policy" (Burgomaster Moenaert)
- 1995 introduction of the 'Park+Bus' formula for the station car park
- 1999 zero tolerance on illegal parking Eiermarkt, Market Square, Municipal Theatre
- 2000 opening of underground car park Pandreitje
- approval Mobility Plan means blue zones will be implemented throughout the city centre Residents and restricted parking times are prioritised in the choices that have to be made. This involves the implementation of the blue zone and residential parking throughout the city centre [...]. Mobility Plan, 2004
 The future parking policy is based on three principles: rotary short stay parking above-ground, parking for extended periods in peripheral car parks and underground car parks, and residential parking in the entire city centre. [...] Parking near your home is a right and not a luxury. Burgomaster Moenaert, Brugsch Handelsblad, 2000
- 2002 expansion of the car park at the Zand thanks to the construction of the Concert Hall
- 2004 blue zone area extended to the entire city centre (implementation mobility plan)
- 2004 the Bruges Mobility Plan gives the green light to design the peripheral car parks ('randparking') Coiseau, Bevrijdingslaan, Magdalenastraat and P&R sites (Lodewijk Coiseaukaai, Steenbrugge, Olympia Noord, Boogschutterslaan).
- 2005 the resident's parking permit is replaced by a more user-friendly parking vignette for residents
- 2008 the evaluation of the Mobility Plan initiates an adjustment of the parking policy for the city centre with 2 blue zones (city centre and West Bruges) and a new zone (inner city) with paid parking (limited to 2 hours).
- 2008 introduction parking by mobile texting
- 2009/10 realisation of a new dynamic parking guidance system
- 2012 outsourcing paid parking and blue zone control to a private partner (OPC / Seris)
- 2012 opening of new car park Langestraat Predikherenrei
- 2012 extension of blue zone area
- 2013 introduction paid parking via an app (a first in Belgium)
- 2014 last parking spaces at the Burg disappear ('car park for aldermen')
- 2016 implementation of short stay parking in Sint-Michiels (as a test for the borroughs)
- 2017 introduction of the scan scooter for parking control
- 2017 new parking plan to implement paid parking throughout the city centre, to install 301 new ticket machines, and to implement blue zones at the edge of the city by defining 6 blue zones
 - We don't implement this parking plan for the joy of it. We implement this parking plan purely to solve problems. There are not enough parking spaces so we have to make choices. Residents cannot find a parking space in their street or neighbourhood, leaving them frustrated. The most recent parking counting from 2015 confirms the many complaints. In certain neighbourhoods in the city centre, the parking pressure is very high, between 80% and 100% and even more. High occupancy levels lead to more traffic searching for a parking space, which we absolutely want to avoid.
 - Burgomaster Landuyt, Brugsch Handelsblad 20/01/2017
- 2017 approval criteria for short stay parking ('shop & go') in the city centre as well as in the borroughs
- 2019 periheral car park Katelijne is no longer withheld after protests by locals (administrative agreement)
- 2019 opening Park&Ride Waggelwater
- 2019 start construction of underground car park Weylerkazerne
- 2020 start construction to expand the underground car park at the Zand

2.9.2 Reflection: parking, the elephant in the room (?)

THE ACADEMIC THEORY

Research by Mingardo (2016) concludes that parking policies in European cities have a similar genesis.

Phase 1: the rise of parking regulation At the very beginning any form of parking regulation is absent. In this first stage both car ownership and car traffic are extremely low, and there is abundant space in the urban area to host cars parked mainly on-street with no necessity to charge for it. Accordingly, parking is not considered as a problem at the city level and no formal policy is made for it. [...] As pressure on the available parking space increases, time restrictions are introduced in the busiest streets or parts of the city (i.e. the Central Business District and main shopping areas). [...]

Phase 2: the advent of pricing parking

[...] The demand for parking space clearly exceeds the supply causing congestion – both to enter the city centre and to search for a parking space – and illegal parking. In order to reduce these problems and to regulate demand, parking fees are introduced initially in the city centre. Usually, the areas where first time restriction was introduced are now the first to be regulated through pricing parking. [...] As time goes one, the area where pricing parking is active is usually extended. Many drivers tend to parking in surrounding (often residential) areas to avoid the payment of parking fee in the city centre.

Phase 3: parking policy as integral part of Transportation Demand Management Phases one and two are characterized by a reactive parking policy. Policy makers simply introduce specific parking measures in reaction to the rise of a specific problem. The different stages of development in these two phases simply follow each other. [...] Quite different is the situation in phase three. The increase attention towards quality of life and environmental standards coupled with the increasing costs of providing extra parking capacity – due to scarcity of land and high costs of building (underground) off-street parking – push policy makers towards a better management of parking demand. Parking becomes an integrated part of transport demand management practices and gets a higher rank on the urban political agenda and in the planning process.

THE BRUGES PRACTICE (1) FOR 1972

The Bruges parking policy (cf. time series) can certainly be fit within this overview. Although one can state that the specificity of the historic inner city and, in particular, the vision development based on the Structure Plan (1972) gave it its own interpretation. The archives revail that Bruges would quickly develop a parking policy hence somewhat skipping phase 2, the introduction of paid parking being immediately framed in an integrated vision (cf. phase 3).

The parking policy emerges (phase 1) as early as the 1950s. The increasing car use – according to a study on policy regulations – quickly confronts the city council with the limited capacity of the narrow, winding, medieval street pattern. Parked cars reduce the traffic flow and require circulation measures (first for buses, later for cars). Parked cars also hinder the fire brigade and make it necessary to implement a ban on parking. Parked cars also affect the experience of the green ramparts and make it desirable to implement a ban on parking on that side. In the 1960s, the blue zone was intended to relieve the pressure on shopping streets. Soon it turns out to have little use since the problem moved to the side streets. The blue zone was being extended step by step.

The problem of the blue zone is in fact a problem that keeps occurring. When they include certain streets in an existing zone, they simply just shift the parking problem.

Chief Commissioner Van Nuffel, note to the Traffic Commission, 24/10/1968

Thanks to the Structure Plan (1972), the city council made the leap from phase 1 to phase 3 (integrated parking policy). The Structure Plan states that an unrestrained parking growth will exceed the carrying capacity of the historic inner city. The saturation scheme shows that there would be a need for 40 hectares of parking space for residents. According to the scheme, another 30 hectares of space should be needed for activities in the Bruges city centre. This would mean that one twelfth of the surface area of the historic centre should be used solely for parking spaces. The Structure Plan therefore concludes that a new parking policy is a 'conditio sine qua non', but takes a pragmatic view of a 'transitional scheme': This means that it is not the intention to jeopardise the inner city with gigantic car parks that will eventually result in more and more traffic. On the contrary, the aim is to stop cars on the edge of the city, while already considering a certain flexibility for the inner-city car parks that need to be constructed immediately. [...]

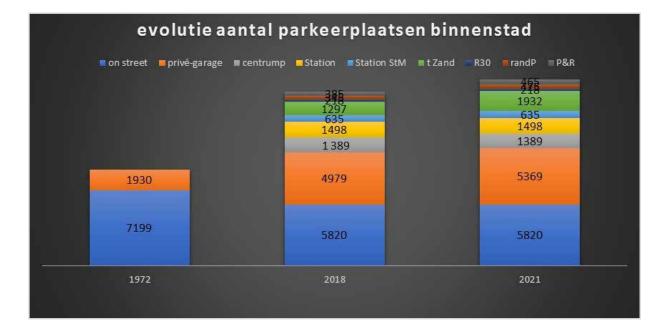
THE BRUGES PRACTICE (2) SINCE 1972

Achieving a centrifugal parking model as a vision of the future is still supported today, although it turned out that numerous practical, budgettary and often political considerations stand between theory and practice. Nevertheless, this aspect of the Structure Plan was also actively monitored. In the 1970s and 1980s, the construction of central car parks made progress. This literally created space in the city centre, so on-street parking in the historical city centre, particularly on-square parking, could be scaled down. The approval of the Mobility Plan (2001) paved the way to open peripheral car parks on the edge of the city and Park&Rides at a greater distance. Although the poor occupancy rates show that those Park&Rides were not always a success.

The figures for 50 years of having a parking policy?

(own reconstruction based on various policy documents)

- In 50 years' time, the number of parking spaces in support in the inner city increased from 9,129 to 16,177 spaces and (based on the policy choices made) will continue to grow to 17,751 parking spaces (+ 93%).
- The capacity of on-street parking decreased by 1,379, this happened mainly in the 1980s and 1990s due to a strong reduction of on-square parking (Burg, Market, Zand Square, etc.).
- Confronted with the lack of parking options for residents, the focus was on constructing neighbourhood car parks. Together with various urban renewal projects, this resulted in an increase of 2,650 parking spaces.
- Mainly in the 1980s, there was a strong focus on the expansion of central car parks, as well as more recently, for example at the Weylerkazerne.
- At the station (both at the centre side and Sint-Michiels side) and the Zand Square, the number of parking spaces grew considerably. Together they account for 21% of the parking spaces, which will rise to 23% by 2021, considering the planned expansion.
- The amount of P&R options and peripheral car parks is rather limited (4%) and will stay that way (5%) if the policy remains unchanged.



The figures tell two stories. The Bruges parking policy seems to both hit the brakes and accelerate. It is strongly demand-driven, i.e. it aims to increase the amount of parking spaces and at the same time tries to be a steering force. Although the steering somewhat happens with the handbrake on because since the 2000s, there has been an official status quo policy for on-street parking after the removal of on-square parking in the 1980s and 1990s. In other words, the steering is limited to smoothing out the roughest edges of the parking challenge.

This handbrake can also be seen in the story behind the figures, in the detailed elaboration of the onstreet parking regime in the city centre. Admittedly, the policy was strengthened, first by a time restriction (blue zone), later by a general introduction of paid parking. However, control measures such as high fees, the restriction of the number of (free) resident's parking permits or a restriction of the maximum number of hours of paid parking in the city centre can rather be described as a procession of Echternach (two steps forwards, one step backwards).

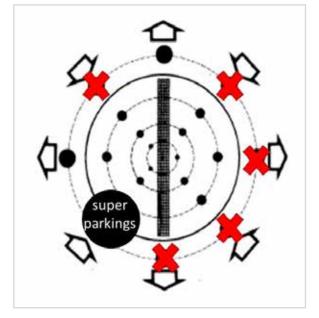
The realisation of the centrifugal parking model cannot be seen as an undivided success either. Only the first parking zones (intra muros) were achieved. On or outside the edge of the city, the model was only given a limited and by no means centre-wide scope. Parking



And outside the city centre? Also so here the demandbased parking policy reaches its limits resulting in a blue zone around the historic centre, municipal regulation for a minimum number of parking spaces for new projects and the implementation of 'short stay parking' at the request of traders.

CONCLUSION? PARKING, THE ELEPHANT IN THE ROOM

The parking policy could be the proverbial icing on the cake of the Structure Plan. But facts show that the city council continues to struggle with this policy theme. There seems to be a catch 22. Dwelling and commerce are of course needed to keep the inner city liveable. But in the eyes of the policymakers a certain car accessibility seems necessary to achieve this. Tourists (and by extension visitors) are welcomed on the edge of the city but this is a lot more difficult for residents and merchants. For them, a more pragmatic approach seems justifiable dixit the policy makers, hence the policy of hitting the brake and accelerating at the same time.



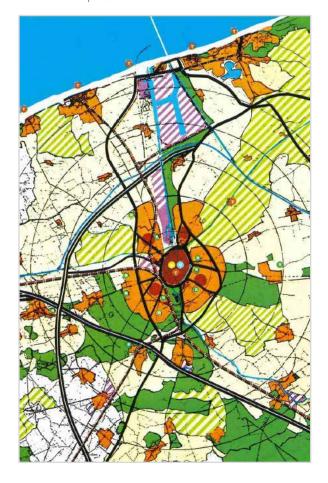
2.10 Ring road(s) around Bruges

2.10.1 The theory of a ring road... or three ring roads

The A of A11, the N of N31, the R of R30 ... Each could have a separate chapter in this work. But they have one thing in common : the dream of a ring road. Or better: the dream of a multiple ring structure.

Three ring roads around Bruges facilitates the traffic flow.

- a. The large ring road is meant for international and regional traffic, formed by the E5 [now called E40, author's note] to the southwest, the A71 to the west [only partly constructed due to the A11, author's note] [...]
- b. The middle ring road entangles the Bruges agglomeration. It ensures the living-working relationship between the agglomeration and the inner port area and connects to the Torhout-Roeselare-Kortrijk axis. [formed by the N31 and a connection which was not carried out due to e.g. the Assebroekse Meersen, author's note]
- c. The small ring road [the R30, author's note] encircles and gives access to the inner city. Structure plan, 1972



The ambition sounds like an illustration of the Golden Sixties, a time when the sky was the limit. An illustration of the dream of a modern society in which King Car is playing a leading part, of a 'car oriented policy' embedded in an ambitious national 15-year motorway programme. And paradoxically enough, one of the driving forces was to achieve traffic liveability. Until the 1960s, the city centre of Bruges was literally thé centre of the traffic system in the Bruges region. Signposts to Torhout and Knokke transformed the Market Square into one large roundabout.

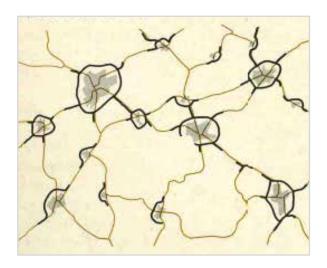
In all West Flemish towns and villages, the traffic network has a radial layout; even when a municipality and its neighbouring municipalities merge into one agglomerated area, the road network remains radial. This immediately leads to a faster convergence of all through-traffic to the centre, made worse by local traffic. The West Flemish road network is in very strong need of broadly-defined diversions or ring lanes. In certain cases, stretches of a ring road have already been constructed in Bruges [...] Important ones are under construction [...] around the Bruges agglomeration.

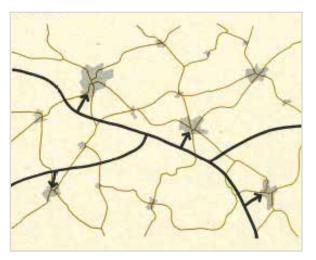
Spatial planning and development master plan of the West Flemish regions, 1968

The construction of multiple ring roads was a first (historical) example of the 'road hierarchy' concept. The idea of multiple ring roads in Bruges has the same basic idea as the circulation loops: moving to the right (type of) lane. No through-traffic in residential areas or historic centres. Once again Buchanan's theory emerges, advocating a strict separation between through-traffic and local traffic.

The presence of through-traffic in towns is explained by the nature of the road system inherited from the pre-motor age. This consisted essentially of direct links from the centre of town to the centre of the next [...] The direct links from town centre to town centre served admirably when a town-totown journey was about as much as a coach-andhorse could manage in a day. But they are most unsatisfactory for the long-distance journeys which the motor vehicle has made possible. Buchanan, 1963, Traffic in Towns

Even though the inner ring road, later the R30, was constructed relatively smoothly, the construction of the middle and outer ring roads proved to more challenging. It is a story that reads like a thriller with numerous plot twists: from a political bribery scandal to a unique coalition of farmers and environmentalists. On the other hand, the harsh reality is that this motorway already gains the reputation of a 'death trap' merely twenty minutes after opening.





2.10.2 Time series inner ring road (R30)

11th century end 13th cent. 1950s – 1960s		first city walls second city walls with double row of canals and seven bridge towers construction of ring road around Bruges in different phases		
		0 0		
1977		etion of the Bruges ring road with the High Katelijne bridge		
1978	first Tr	affic Circulation Plan, introducing loops leading the inner-city traffic		
	towar	ds the newly R30		
1983	openir	pening of tunnel the Zand		
1992		nated system of traffic lights on the R30 following the measures in the d Traffic Circulation Plan		
2001	cycle j	path along the R30 between Dampoort and Kruispoort		
2005	better cyclist	protection for the cycle path along the R30 after 2 fatal accidents with s		
2015	preser	itation of vision for the R30 by the Flemish government		
2020	preser	tation of the strategic vision "Stadsfietsroute' FR30 (Bicycle Ring Route)		

2.10.3 Time series middle ring road (N31)

The stories of the middle ring road (with the construction of the N31) and the outer ring road (with the construction of the A11) were strongly intertwined until 1997. Therefore the middle and outer ring are jointly presented till 1997 in the following time series :

- 1931 proposal for a London Istanbul motorway by the International Association for Tourism
- 1934 establishment of a section of this motorway within the Bridges and Roads Administration that drew up the scheme for the Brussels-Ostend motorway, salient detail: the team responsible for this section is based in Bruges (Weber, 2008)
- 1935 principle decision to make a double connection Brussels Ostend (one following existing state roads which would be upgraded, one following a new motorway (highway) trajectory)
- 1937 start construction of the road section Beernem Loppem A5 (later E40)
- 1951 first design of the motorway Bruges Kortrijk
- 1952 establishment of the Temporary Road Fund
- 1955 establishment of the Autonomous Road Fund and start preparations of a 15-year programme
- 1956 opening (of the entire route) Brussels Ostend, only 28 km (between Aalter and Jabbeke) was completed before the start of World War II
- 1959 national motorway programme with the ambition to construct 1,528 km of motorways
- 1963 the Bruges Kortrijk route is approved by Royal Decree and classified under the 'motorway category'

- 1965 'Spatial planning and development master plan of the West Flemish regions' and the call for a multiple ring road structure for the Bruges agglomeration (this vision is translated into the regional urban plan ('gewestplan'))
- 1966 request from burgomasters Van Maele (Sint-Michiels) and Leys (Sint-Andries) to redirect the motorway towards Jabbeke
- 1968 Royal Decree for the construction of the A17 motorway in order to relieve traffic on road no. 71 (current N50) and to open up of the port of Zeebrugge, the route cuts through the municipalities of Sint-Michiels and Sint-Andries and crosses the E40 in Loppem (Royal Decree 11/07/1968)
- 1972 the Bestuur der Wegen (Road Administration) concludes that it is not desirable to have the A17 pass through Sint-Michiels and Sint-Andries, the A17 route has – dixit the Administration - to move towards the E40 junction in Jabbeke, the original route is re-designed as an 'expressway' – national road RW 905 (RD 04/12/1972)
- 1972 opening route Bevrijdingslaan Hoefijzerlaan on the old railway embedment
- 1974 due to budgetary constraints, the Roads Administration prioritises the construction of the expressway RW905
- 1974 in response to the draft of the regional plan Bruges-Belgian East Coast ('gewestplan'), the strategic decision is made to situate route A17 (nowadays known as E403) between Bruges and Torhout, with a connection to the E5 (E40) at Jabbeke
- 1974 the Bruges Action Group for the Environment (BAL) protests against the A17 but a Working Group Expressway (grouping inhabitants of Sint-Michiels and Sint-Andries) is in favour of this motorway, which should take care of the traffic towards the port of Zeebrugge
- 1974 criticism of the expressway by Humo (14/11/1974), Knack and Lastige Bruggeling (vol. 1, no; 1) about the alleged conflict of interest of former burgomaster Van Maele A lot becomes clear when it is discovered that friends of the Bruges Burgomaster Van Maele (who in the meantime also became the director of the 'Interkommunale van Autowegen van West-Vlaanderen') are planning to parcel out land along this expressway. This expressway, with its side roads at the State's expense, would then become the service road for these allotments [...].



- 1975 opening of the Expressway (National Road 905), a first fatal accident occurred after 20 minutes involving a 30-year-old father of three children
- 1975 first demand for 'safety measures'
- 1976 environmental groups and the Expressway Working Group call for an alternative route between Waggelwater – Jabbeke – Torhout in order to save the nature reserve Meetkerkse Moeren
- 1976/7 construction of bridges in Varsenare, with joint protests from the agricultural sector and the environmental movement
- 1977 bridge over the Bruges Ostend canal to create access to the new AZ Sint-Jan hospital
- 1977 opening up of the expressway Oostendse Steenweg Waggelwater
- 1977 establishment of the A17 front with BAL, the Flemish Farmers' Association and the General Farmers' Syndicate as initiators
- 1977 the new Minister prefers an alternative A17 route between Bruges and Torhout, with access to the E5 at the National Road 905 (N31), this requires a connection between Loppem and Torhout (the route with a junction in Jabbeke is abandoned, the bridges built in 1976/7 turn into so-called "ghost bridges" and are demolished in 2011/12)
- 1980 new study on the expressway by the national Road Fund (studying different scenarios such as constructing a long closed tunnel, two middle-long tunnels, an open tunnel and a succession of tunnels under the expressway)
- 1981 establishment of the Working Group 'Expressweg Veiliger' (English: Safer Expressway) – including the first cycle tour (quote from an internal memo) The entire Expressway campaign started on 2 September 1981, the day on which PVDB, as an 8-year-old boy, became the innocent victim of an accident that possibly could have been avoided. A few minutes later, young people were already drawing up a petition; someone else wrote a letter to various newspapers expressing the increasing discontent among the people. This ball got rolling.
- 1981 liquidation of the 'Interkommunale Vereniging voor de Autosnelwegen van West-Vlaanderen', transferring management to the Bridges and Roads Administration (later the AWV)
- 1983 extension of the RW905 to the E5-A17 interchange
- 1983 opening of the Antwerp Knokke expressway (but with numerous level crossings organised by traffic lights)
- 1983 opening of the A17 between Lichtervelde and Loppem, the motorway goes from Kortrijk to Bruges
- 1984 protest on redesigning the Koning Albert-laan, the alternative idea is launched to turn the Bevrijdslaan into the most important access road to the Bruges city centre
- 1984 various protest actions (including sit-in and traffic jam action)
- 1987 construction of the complex tunnel Gistelse Steenweg
- 1986 cut Zandstraat at the intersection of the Expressway
- 1987 start (and strike) of the construction works for a tunnel for cyclists and pedestrians at the Zandstraat
- 1990 publication of the Traffic Liveability Plan in which the Group Planning argues to review the function of the Expressway as an urban collector road instead of only access road to Zeebrugge
- 1991 advisory plan of the deputation (province) to optimise Zeebrugge's accessibility by car/truck with the following vision:
 - a new connection Blauwe Toren A18 in Jabbeke follwing a new route, no longer through nature reserve Meetkerkse Moeren but a route between the Ostend – Bruges canal and the Ostend – Bruges railway line.
 - a new ring road around Lissewege
 - a connection between Blauwe Toren and Knokke Antwerp expressway
- 1991 the road profile in the Lissewege town centre is narrowed from 2x2 to 1x1
- 1994 Spatial Policy Plan Bruges ('Ruimtelijk Structuurplan Brugge') repeats the plea for the A18 road extension in between Jabbeke and Westkapelle
- 1994 manifesto of the Bloemendale committee making the plea for an alternative traffic policy

- 1994 construction of the overpass complex tunnel Torhoutse Steenweg
- 1995 approval of preliminary draft Spatial Structure Plan for Flanders ('Ruimtelijk Structuurplan Vlaanderen') with the introduction of a formal road hierarchy indicating a higher road network
- 1996 Minister Baldewijns cancels the connection between the A18 and the N49
- 1997 approval Spatial Structure Plan for Flanders
- 1998 feasibility study on upgrade N31, the N31 has three functions: 1° the main function is to serve as a connection between the Flemish main road network and the coast in order to open up the seaport, 2° an additional function is to serve as a collector road for tourist traffic and 3° and additional function is to serve as a collector road for the urban area of Bruges
- 1999 straightening the "death-trap" bend at the Blue Tower
- 2000 elaboration of the urban redevelopment design N31
 - The task: the N31 must become a primary road I, i.e. with a maximum separation between through-traffic to the seaport area and local traffic. At the same time this means that the intersections between the N31 and the access and exit roads of the urban area must be on a different level. Brugsch Handelsblad, 27/10/2000
- 2000 several NGOs (including the Bloemendaele Comité, the Werkgroep Expresseg Veiliger and Groen vzw) proposes an alternative plan ('doortochtplan')
- 2001 the draft of the Flanders Mobility Plan ('Mobiliteitsplan Vlaanderen') is provisionally stipulated by the Flemish Government including 25 missing link projects, e.g. N31 and AX (A11)
- 2001 construction of the Blauwe Toren complex (N31 x N371)
- 2003 start of the regional action plan 'Gevaarlijke Punten', popularly renamed the "black spots"-program referring to the numerous dangerous insections that would be tackled
- 2009 construction of the Koningin Astridlaan complex
- 2009 construction of Witte Molenstraat tunnel and bridge for pedestrians and cyclists at the Tillegemstraat
- 2011 construction complex Koning Albert I-laan
- 2011 construction complex Legeweg
- 2014 construction complex Chartreuseweg
- 2017 opening of the cycle path along N31
- 2018 construction of the Bevrijdingslaan complex, the last traffic lights on the N31 at Sint-Michiels and Sint-Andries disappear

2.10.4 Time series outer ring road (A11)

- 1997 approval Spatial Structure Plan for Flanders
- 2001 provisional determination of the draft of the Flanders Mobility Plan with 25 missing link projects, including N31 and AX (A11)
- 2002 approval of the (draft) vision document (Dutch 'streefbeeldstudie')
- 2005 approval A11 funding using a public-private-formula (Design-Build-Finance-Maintain contract)
- 2008 consensus between the burgomasters of Bruges, Damme and Knokke-Heist on the preferred route
- 2009 final approval of the A11-traject by the Flemish Government (30/04/2009)
- 2010 presentation of the A11 design on different information markets and information evenings
- 2017 opening of the A11 (festive opening on 26 August with cyclists who are exceptionally allowed to cycle on the A11)

2.10.5 Reflection: Bruges under the spell of the ring road

1960S – 1970S: BIRTH OF THE R30, THE LITTLE BROTHER

Once being part of the military defense system of the city, the outer-ramparts were selected in the 1950s for the construction of a ring road. In the 1960s, the ring road was constructed road section after road section. Expropriations, even of a whole row of of houses at the Kruispoort, were at that time not an issue. Only at the High Katelijne bridge things went wrong in 1974. The new bridge had stability problems so the Engineering Corps of the Belgian Army had to blow up the span over the canal. In 1977, the ring comes full circle and the finishing phase starts with the construction of the Bargeweg, a new Kruispoort bridge and the construction of a tunnel underneath the Zand. In two decades time, a paved or even an earthen road around the circular canal, locally even with a ring railway track, was transformed into a 2×2 ring road. The importance cannot be overestimated. In the past, all main roads led to the gate, following the main streets leading towards the central Market Square. Now the R30 offered a unique opportunity to keep through-traffic out of the city centre. It is therefore hardly a surprise when a first circulation plan came into force in 1978.

The concept of a 'ring road' can anno 2020 however be questioned. With a length of 9 km and 33 intersections, of which 18 equipped with traffic lights and even 1 with a roundabout, the Bruges R30 can in no way be compared to the Brussels (R0) or the Antwerp (R1) ring road. Ten bridges that connect the R30 with the historical city centre makes it even more complex. As a result, the R30 is not used for through-traffic but rather as a collector and distributor road. A 'real' ring road is found west, in the direction or even past the borroughs of Sint-Andries and Sint-Michiels, which belong to the new merged municipality of Bruges since 1971. A quest that did not happen without a struggle.

1970S – 1980S: A PROCESSION OF ECHTERNACH

At the end of the 1960s, a critical generation of citizen awakes. A generation for whom it is not acceptable to situate a motorway like the A17 straight through a nature reserve like the Meetkerkse Moeren. Furthermore, the government's budget goes into red because of an oil crisis followed by a budgetary crisis. The ambitious motorway programme is forced to downscale. In the Bruges region, the construction of the RW 905 is given priority after a heated public debate on the A17, although this choice is allegedly linked to a political conflict of interest. The Expressway (later the N31), which serves as collector and distributor road for Sint-Michiels and Sint-Andries. The construction of a motorway connection Jabbeke-Bruges is ultimately not withhold. The plan only results in the beginning of the construction of two bridges that later turn out to be so-called "ghost bridges".

Hence the RW 905 becomes the most important access and exit road. Not only for the city but also for the seaport of Zeebrugge and the touristic Belgian East Coast. It is a great responsibility for an at first rather ordinary national road with an intersection equipped with traffic lights every 200 to 600 metres resulting in a series of black spots and big disruptions in the flow ("accordion effect" leading to sequential traffic jams at each interesection).

Since its opening, the Expressway turned out to be a very unsafe traffic artery. [...] Thus, 1,102 accidents were recorded in 12 ½ years with 28 fatalities at the scene and 99 seriously injured of whom it is not known whether they died after hospitalisation. However, these are only figures from the city police's records. The figures of the National Police are unknown to us [...] If it can be assumed that the National Police has carried out 1/3 of the number of records, then the following situation would be realistic since 1/1/1977:

444

- o Slight material damage 632
- o Serious material damage 224
- o Slightly injured
- o Seriously injured 132
- (number of deaths after hospitalisation is unknown)
- o 37 (!) deaths letter signed by Burgomaster Van Acker (11/08/1989)

In the 1970s and 1980s, the call to fix this "death trap" increases. But the lack of a unified stance prevents to tackle the problem. In the 1970s, the committee that is anti A17 gets the upperhand during a debate regarding the Meetkerkse Moeren. This committee consists of an unusual coalition of environmental action groups, the General Farmers' Syndicate and the Farmers' Union. Action groups that stand up for traffic safety and traffic liveability in Sint-Michiels and Sint-Andries bite the dust. And as a result of budgetary problems, an overpass junction (suppressing the traffic light junction) is only constructed at the Gistelse Steenweg and later at the Torhoutse Steenweg. The local authorities of Zuienkerke and Bruges even clash during the debate regarding a ring road around Lissewege, so there is no prospect of a quick solution. In the meantime, the motorway confirms its deadly reputation year after year. The stalemate seems complete.

1990S – 2000S: THE GROWTH OF A SOCIAL CONSENSUS

It would take until the mid-1990s before a consensus arose and hence a breakthrough was achieved. The Spatial Structure Plan for Flanders introduces a formal road hierarchy. The plan for a motorway between Jabbeke and the Blauwe Toren is definitely abandond. A consensus regarding the Expressway is growing both in Bruges and Brussels (the region's capital) thanks to a feasibility study, an urban design and an Environmental Impact Assessment. Four intersections once equipped with traffic lights are designed to be on a different level by locally inserting the road (Dutch: 'insleuven'). Bicycle tunnels and bridges mitigates the impact on the coherence of the cycle path network. Budget is no longer an issue. Thanks to united lobbying efforts in the Bruges region, the N31 is now number one on the list of Flemish missing link projects and is put on the agenda to fix black spots (the famous TV3V project). In 2006, works start by redesigning the crossing of the Koningin Astridlaan. Twelve years later, in 2018, the time has come to inaugurate the Bevrijdingslaan complex: after 43 years, the N31 gets rid of its 'death trap' reputation. Only the passage through Lissewege still needs to be tackled.

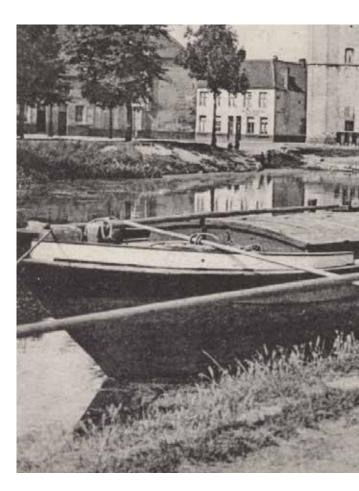
And also the third, outer ring (A11) gains momentum thanks to the Spatial Structure Plan for Flanders and is completed in 2017.

2.11 Spatial planning

"Urban planning" has to do with "the creation, maintenance and reform" of our built environment, our living environment. The living environment mainly concerns our environment in a spatial sense. Urban planning provides permanent living spaces for society. Structure Plan, 1972

Peeters (2014) stated that Le Corbusier can be considered being the most influential mobility expert and Henri Ford being the most influential spatial planner. Rightly so, because time and time again a decision for one certain policy area also impacts the other area. For better or for worse. This chapter is not intended to tell the story of spatial planning in Bruges in extenso but looks more closely at how spatial choices guided the mobility debate in Bruges. For better and worse.

Every medal has two sidings, also the mobility medal has an illuminated as well as a more dark side. Bruges from the Middle Ages is the perfect example of this. No access to the Zwin meant no port activities and a decline of one of the (then) world's richest cities. It is an extreme example of how opening up transport routes (or the lack of it) can push the spatial development of a city and region in a certain direction. But there are also many examples in the present. Look at the impact of the N31 on the development of Sint-Michiels and Sint-Andries. Or look at the A11 that brought Knokke closer to Bruges (and vice versa). However, due to lack of time, this will not be discussed further.





2.11.1 Timeline

end of the 19th century

King Leopold II and the Bruges city council launch the Bruges' dream

- 1956 building regulation ('verordening') approved by the city's council
- 1962 national Law regarding the organisation of spatial and urban planning
- 1972 Structure Plan of Bruges (the first one in Flanders)
- 1975 policy papers and master plans regarding (the limitation of) building heights along the access roads to Bruges
- 1977 Regional plan Bruges Belgian East Coast ('gewestplan')
- 1978 introduction of municipal taxes on the vacancy of dwellings ('leegstandstaks')
- 1979 introduction of functional home improvement grant
- 1981 introduction of the so-called 'carcass construction' principle
- 1979 regulation on advertising and publicity
- 1989 regulation on building and renovation, with parking norms
- 1993 urban planning regulation including the introduction of norms for parking facilities
- 1995 approval of the preliminary draft Spatial Structure Plan for Flanders ('Ruimtelijk Structuurplan Vlaanderen')
- 1996 approval of spatial policy plan for Bruges('ruimtelijk beleidsplan voor Brugge')
- 1997 ratification of the Spatial Structure Plan for Flanders
- 1999 introduction of subsidies for living above shops in the city centre
- 2000 drawing up the Municipal Spatial Structure Plan for Bruges (approval 2006) ('Gemeentelijk Ruimtelijk Structuurplan Brugge')
- 2006 update of the local urban planning regulation
- 2011 amendment of the urban planning regulation, also standardisation of bicycle parking spaces
- 2018 approval of the strategic vision of the Spatial Planning Policy Plan for Flanders ('Beleidsplan Ruimte Vlaanderen')
- 2019 proposal for a new road categorisation

2.11.2 Reflection: spatial planning as the muse of a mobility policy

Let's go straight to the conclusion. Bruges shows how actions related to the policy domain 'spatial planning' can initiate or support a phase in mobility policy (cf. CREATE framework, chapter 1.2). Spatial planning as an instrument is therefore a-moral, it is only through policy choices that true consequences reveal themselves. In support of this thesis, this chapter focuses on the different phases Bruges went through in the second half of the 20th century.

HOW SPATIAL PLANNING ROLLED OUT THE RED CARPET FOR THE AUTOMOBILE (AND SCALED BACK THE CITY CENTRE)

HOW SPATIAL PLANNING STOOD AT THE VERY BEGINNING OF A 'CAR-ORIENTED POLICY' IN BRUGES AND THE REGION

The story of spatial planning in Bruges in the 20th century started with two dreams: the Bruges' dream and the Flemish dream. The Bruges' dream is – quote from Knack (15/08/1990) – the 19th century dream to transform a miserable provincial town into a tourist museum city and to reconnect it with the sea. The Flemish dream is the one of the Fleming who is supposedly born with a brick in his stomach, i.e. a suburban dream of building a home with a garden and a car on the house's private driveway.

The dream to turn Bruges into a second Nuremberg (Germany) is also reflected in the Structure Plan. Inspired by the Athens Charter (1962) that states that historic cities are the keepers of the collective memory, a development model for the inner city takes shape. In the 1970s, an urban renewal policy is launched, including a functional home improvement grant. In terms of mobility, this not only initiated a new traffic model but also puts pressure on the inner city's traffic system due to the growth of tourism. For example, coaches were still allowed to drive into the heart of the city until the 1980s.

Bruges' dream of a seaport was given a new momentum in the 1970s -1980s by the creation of a vision to develop an inner port and a new outport. The polder landscape was transformed into a modern port landscape. Plans for a Bruges outer ring road – extending the motorways – anticipate the expected growth in goods transport. It marked the beginning of the saga that led to the N31 and A11 as known today (see 2.10).

And what about the Flemish dream? Inspired by the Athens Charter of 1933 that calls for the separation of living, working and leisure etc., a wave of road paving and construction hit Greater Bruges. To this end, the regional plan (1977) spread a colourful patchwork over the rural landscape. Houses rose up in new subdivisions. Shops and industrial estates started to appear along both sides of the access roads, such as Waggelwater and Herdersbrug.

Like most cities, the urbanised area of Bruges expanded significantly during the 20th century, especially after 1950. [...] At many locations, horticultural, pasture and arable land reached to the outer edge of the fortifications. The suburban districts were modest in size and still formed fairly separated cores. There were only a few buildings along the main access roads. These access roads were usually characterised by an adjacent rows of trees along both sides.

[...] A century later, little remains of this rural periphery. Nearly all the large green spaces in the immediate vicinity of the city centre were fragmented or disappeared because of the urbanisation of the suburban districts. The trees along the access roads were sacrificed to widen the roads due to increasing car traffic.

Ryckaert, 1999

Mobility being a derivative of transport demand, the above-mentioned evolutions implies that these dreams and their required space had a major impact on mobility and on the increase of car traffic in particular. This even creates a gridlock since the car dependency initiated a vicious circle, generating centrifugal forces hence strengthening urban sprawling ... enhancing car dependency. Also functions were no longer present nor focussed in the city centre so people became more dependent on their cars. The result? An imminent tension between the Bruges' dream that is about (among other things) improving the core (shopping) area in the city centre and the Flemish dream that led to ribbon development ('lintbebouwing') and shopping centres outside the city centre. Above all, this also explains the difference in policy ambitions and policy speed between the city centre (that applied a 'city of places' model since the 1970s) and the borroughs (where the 'car-oriented policy' prevailed until the late 1980s).

HOW SPATIAL PLANNING ROLLED OUT THE RED CARPET FOR SUSTAINABLE MOBILITY PLANNING ... OR VICE VERSA (?)

Turning the proverbial oil tanker in the borroughs in the early 1990s occured thanks to the Traffic Liveability Plan (1990). Once again inspired by Buchanan (1963) and his theory on the traffic capacity of roads and surrounding neighbourhoods, a vision on the road hierarchy emerged from the idea of "the right traffic at the right place".

The main point to be made is that through-traffic is a complicating for in towns which first needs to be disentangled from the problems of town traffic proper and then needs careful consideration for the best way to deal with it. Buchanan, 1963, Traffic in Towns

The Traffic Liveability Plan translates this into the following principles:

- Development of a hierarchical traffic structure in which traffic intensities and the function of the different streets coincide with the meaning of the street in question ('meaning' i.e. in relation to the road hierarchy - pattern and the spatial and functional pattern of Bruges).
- 2) In residential areas, which are suffering from additional traffic pressure, measures should be taken to discourage unnecessary traffic and cutthrough-traffic and to adapt the driving behaviour and speed of traffic fit to the residential nature.
- 3) This means that it is necessary to spread traffic over the various radial main access roads, on the ring road and the Expressway, by concentragingtraffic on these roads other local streets can be safeguarded [...]

A few years later, this idea is also endorsed by the Spatial Structure Plan for Flanders (1994, preliminary draft - 1997), defining the road categories, their (desired) main characteristics and the selection criteria. The Spatial Structure Plan for Flanders also introduces a category of (international) highways and primary roads. At a municipal level, the local roads are selected within the Municipal Spatial Structure Plan (1996), formalising the Traffic Liveability Plan.

The road categorisation makes it possible to demarcate residential areas. In the 1990s and 2000s, these areas were step-by-step (re)designed as 30 km/h zones where cut-through-traffic was banned. Doing so the monopoly position of King Car faded and sustainable mobility planning emerged with an increasing focus on sustainable modes of transport. In addition, the Spatial Structure Plan for Flanders cancelled the plans for a highway between the Blauwe Toren and Jabbeke. Plans for the AX, the later A11, and the redesign of the N31 on the other hand were given green light. Also in this case, the ideas of a road hierarchy were translated into infrastructure investments.

HOW SPATIAL PLANNING ROLLED OUT THE RED CARPET FOR A 'CITY OF PLACES'

The Structure Plan made the leap to a 'city of places' policy. The vision also inspired the Bruges city council to develop a range of instruments that bridge the gap between spatial planning and traffic engineering. Thanks to an urban regulation ("verordening"), the city began fighting against what Gehl (2010) would call carchitecture. Architecture experienced at a high speed. Architecture that lacks the human scale dimension. The regulation e.g. banned illuminated advertisement on façades and garage doors that would transform a street wall into an antisocial plinth building ... Therefore, the regulation reinforced the decision to design the public space on a human scale. With attention to details that colour the streetscape, such as benches and green elements.

2.12 Streets and squares

The streets and squares of Bruges are at the heart of the Structure Plan. The conception of the pedestrian area as a traffic barrier gave birth to a vision on a series of policy themes such as circulation and parking.

2.12.1 Time series

- 1972 Huidevettersplaats (now Huidevettersplein) becomes traffic-free Whereas it is necessary to preserve the typical and picturesque character of the Huidevettersplaats and to promote tourist traffic there. Regulation, 07/10/1971
- 1973 Structure Plan for Bruges presents a traffic model with a literally and figuratively central role for (a gradual extension of) the pedestrian area
- 1977 Breidelstraat and part of the Burg (6,500 m²) made traffic-free Whereas it is necessary to preserve the typical and wonderful character of the Breidelstraat and the Burg and to promote pedestrian traffic there Regulation, 25/10/1977
- 1978 city council's formal statement to replace asphalt concrete with cobblestones
- 1978 Ganzestraat (and later Moerstraat) as the first woonerf ('living street') in Flanders After all, it was found that a street is more than just a passageway for cars. A street had to adapt to the rhythm of pedestrians. It is clear that the street had to regain its former function of a meeting place and playing zone. Pedestrians, children, elderly and cyclists suddenly became more important than cars that now have to behave as a guest in the street.
- 1979 Sint-Amandstraat transformed into a car-free 'shopping pedestrian street'
- 1980 extension of pavements on the Market Square
- 1980 Vlamingstraat (and in December of that year the Smedenstraat) redesigned as the first 'shopping erf'
 How the car as all-consuming monster pushed (shopping) pedestrians more and more to the side and how the roles are nowadays reversed thanks to wide pedestrian zones and thanks to a strictly space for cars.
 Brugsch Handelsblad, 04/07/1980
- 1980 Simon Stevinplein is made car-free and is redesigned
- 1981 Jan Van Eyckplein and surroundings are redesigned
- 1981 expansion of shopping areas in Mariastraat and Gruuthusestraat
- 1982 Guido Gezelle square, Walplein, Wijngaardplein and surroundings are redesigned
- 1982 first 'woonerf' outside the city centre, Tramstraat (Assebroek) and Hertsvelde (Sint-Michiels)
- 1982 opening of the 't Zand-square
- 1984 protest redesign of Koning Albert I-laan (plans for transforming the 1x1 into a 2 x 2 road profile)
- 1984 redesign Geldmuntstraat
- 1989 the 2,000th Bruges-style lamppost is installed (replacing the neon tube lamps that appeared on the streets in the 1960s and 70s)
- 1997 ban on parking at the Market Square
- 2001 Schouwvegerstraat as first play street ('speelstraat') in Bruges
- 2002 redesign Ezelstraat
- 2014 car-free shopping streets Steenstraat
- 2015 redesign of Geldmuntstraat according to the 'shared space' concept
- 2016 carfree shopping streets (axes Geldmuntstraat Noordzandstraat and Steenstraat Zuidzandstraat)
 - Initially from 10:00 to 18:00, after protesting from 13:00 to 18:00
- 2017 first two school streets
- 2018 redesign of the 't Zand-square
- 2019 start redesign of Katelijnestraat which will result in a new extension of the pedestrian area

2.12.2 Reflection: the renaissance of the street

In Bruges, the main streets had become traffic sewers in which constant traffic jams literally forced pedestrians against the walls of the building. Frank Van Acker (Vlaams Weekblad, 02/05/1980)

If a street is conceived as a (high)way, the street(scape) will disappear. A wordplay (which sounds better in Dutch) pointing out what happened in Bruges in the 1950s and 1960s: widening and asphalting of streets, shrinking pavements ... Even traffic lights with bus detection were installed on the corner of the Eiermarkt (a mere 50m from the central Market square). The street transformed from once a living space into a traffic space. The social and optional activities disappeared like snow in the sun, only the necessary traffic activities continued to exist (inspired by: Gehl, 2010). Analysing this shift the Structure Plan calls for a 'renaissance of the street'.

The ground floor of the city must regain its original purpose. It must once again take the walking desires of pedestrians into consideration, define the pavements in front of shops, measure the transition zone to trees and greenery. Parking areas on the edge of pedestrian areas must be integrated into the urban space as much as possible. Parking spots should fit in the streetscape by planting trees and greenery. The city floor is the horizontal and living façade of the city.

Structure plan, 1972

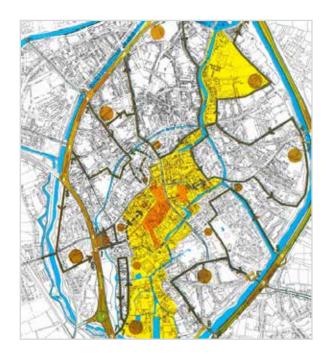
The vision meant that 76 streets were redesigned in the 1980s, partly thanks to the sanitation of the canals (which necessitated the deployment of sewers and hence the renewal of the street surface) and the closure of the ring road (which meant that the national roads in the inner city had to be transferred 'in good condition' from the national to the local government). Inspired by the concept of 'living streets', cars are no longer the norm and have to behave as a guest. The materialisation supports and confirms the historical character of the city centre. The principle of a minimal pavement gives way to a minimal roadway (and a maximal footpath). At the same time, the redesign of several squares – often car-free – acts as eye-catcher.

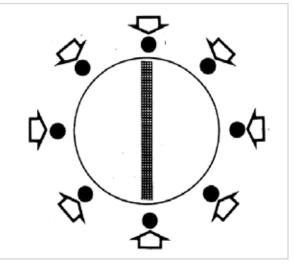
The squares were rather strongly impacted by car traffic and parking pressure and turned into negligible and soulless open spaces. In the conception to redesign the squares, an attempt was made every time to bring the various functions of squares back. First and foremost, the role of squares as meeting places [...] so public events – fairs, festivities, markets – could take place there. [...] There was still a traffic function but it became less dominant and the parking space was rearranged for a number of cases. The innovation was also an aesthetic improvement.

Brugsch Handelsblad, 1987

The new view on streets and squares implied more than only the redesign of streets and squares. The central objective of the traffic model was the idea of a traffic barrier that would put a stop to through-traffic in the city centre. This 'traffic-free' barrier would run diagonally through the city centre and would function as a pedestrian area, hence creating the basis for the circulation plan.

The idea was to have the traffic barrier coincide with the cultural axes in the city: a "looking axis" grafted to the Minnewater – Dijver – Market Square – Langerei axis and a shorter "listening axis" on the Biekorf - Municipal Theatre axis.





Structure plan, 1973 - how the circulation plan and the parking model was in fact a pedestrian plan, a call for the city at a pedestrian's scale

When evaluating in 2020, the pedestrian area is less ambitious in terms of surface area than initially advocated. The focus shifted towards the so-called Golden Triangle (between the Market Square, the Zand and Minnewater), which is confirmed as the tourist core area by the 1991 White Paper. However, the basic idea of a barrier was at the heart of the two circulation plans. The city also gradually works on an extension of the pedestrian area. This is apparent for the Geldmuntstraat – Steenstraat in 2016, or by the strategic decision in 2020 to develop a new public transport plan, meant to put the buses outside the pedestrian area. And in turn, this decision offers an opportunity to further extend the pedestrian area.

When it rains in the city centre, it also drips in the borroughs. In the 1980s, the old town squares were also given a new look. It is striking that the 'city of places' philosophy was not completely adopted here. A higher residential value? Check. Space for (parked) cars? Also check. The layout of squares illustrates the different way of thinking regarding mobility between the city centre and the borroughs. Equally striking is the fact that the development of a vision only focused on the square itself, without linking a broader vision (e.g. including neighbouring streets) to it.

- 1980 centre square (Sint-Kruis)
- 1982 Onder de Toren square (Lissewege)
- 1983 Pastoor Verhaegheplein (Ver-Assebroek)

- 1983 Gaston Roelandtsplein (Assebroek)
- 1983 Sint-Pietersplein (Sint-Pieters)
- 1984 square at the Arendstraat (Sint-Jozef)
- 1984 market square (Zeebrugge)
- 1987 municipal square (Sint-Michiels)

The redesign of streets in the borroughs also happened with the proverbial handbrake on. This can partly be explained by the absence of a new second ring road as an incentive so access roads do not primarily have to serve as collector roads. A switch was made nevertheless, particularly thanks to the Traffic Liveability Plan (1990), which set out the design principles for each type of road, from a 'car-oriented policy' to a 'sustainable mobility planning'. The STOP principle started to emerge. Quality cycle paths, bus lanes and speed reduction measures became part of the urban designer's toolbox.

The radial main roads that connect to the city centre and the R30 that connects to the borroughs and hinterland also determine Bruges' mobility image. These roads are for the most part a historical fact since as real stone roads in previous centuries, they provided connections to and from Bruges for different types of trade and transport. They have gradually become the major local access roads to the city. The morphology of these roads was adapted but stayed within the building lines that have already been established since the very beginning. There was little room to make structural fundamental adjustments to the width and thus the capacity of that road.

Evaluation Mobility Plan (2011)



2.13 Touris

Tourism

2.13.1 Timeline

- 1255 (?) organisation of the first Procession of the Holy Blood, coinciding with the annual market (the Meifoor) from 1310 onwards
- 1815+ after the Battle of Waterloo, Bruges becomes a popular stop for Brits on their way to the famous battlefield
- 1847 publication of the first tourist guide Carte-Guide de Bruges (Daveluy)
- 1877 King Leopold II and his disciples launch the Bruges' dream
 - Je voudrais voir restaurer ses anciens et beaux monuments, afin que Bruges devienne une autre Nürenberg. Que la ville toute entière ne soit qu'un vaste et splendide musée, et pas un étranger ne visitera la Belgique sans aller le voir. Leopold II, 1877
- 1892 Georges Rodenbach writes the book 'Bruges La Morte'
- 1909 establishment of the 'bureau voor kostenloze inlichtingen' (the predessor of the Tourist Information Board) by the association 'Brugge Voorwaarts'
- 1905 establishment of a 'gondola service on the city canals', start of boat trips on the canals
- 1936 approval of the law on paid leave (congé payé) lead to the establishment of the Tourist Office

"to adopt and develop all initiatives so people get to know and visit our city more and more as a tourist city and especially as a tourist centre, and therefore create a rich source of revenue for our citizens with local businesses."

- 1977 introduction on one-way traffic for horse-drawn carriage rides in Breidelstraat
- 1978 new route for horse-drawn carriage rides (as a result of the circulation plan)
- 1978 implementation of a parking area for coaches near the High Katelijne bridge (on the north side) a bailey bridge from the Belgian army makes the connection towards the Minnewater
- 1980 opening of car park for coaches at the Bargeweg
- 1981 coach passengers may only disembark at the Market Square, board at the Katelijnepoort
- 1990 in response to the 'SOS Bruges' campaign, the city council publishes the 'Witboek van een beleid' (White Paper)
- 1990/1 redesign extension car park for coaches at Bargeweg
- 1992 the publication 'Brugge word wakker!' calls for the development of a global vision in which, in response to the rise of mass tourism, a new touristic - cultural project is advocated, resulting in among other things the construction of the Concert Hall and the candidacy of Bruges 2002
- 1995 coaches are no longer allowed to access the city centre (with the exception of coaches bringing tourists to their hotels in the inner city) in implementation of the Traffic Circulation Plan
- 1996 ban on building new hotels in the city centre
- 2000 foot ball tournament Euro 2000 introduces its own Mobility Plan
- 2000 the city centre of Bruges is recognised by Unesco as a world heritage site (after the Bruges Beguinage was already listed in 1998 and the Belfry in 1999)
- 2001 redesign car park for coaches Kanaaleiland
- 2002 Bruges, European Capital of Culture, also implies a better reception for groups which is being centralised at the Bargeweg where a Vestibule square is created
- 2002 Bruges 2002 also implements a mobility plan that includes peripheral car parks with shuttle bus services but these are rarely used
- 2007 realisation of a car park for campers at the Kanaaleiland
- 2009 the Procession of the Hooly Blood was included on the Unesco's List of the Intangible Cultural Heritage of Humanity
- 2014 parking ban for coaches at the Vrijdagmarkt the Zand
- 2018 opening cruise terminal in the port of Zeebrugge

- 2019 approval of the strategic vision paper on tourism
- 2019 start construction of a new Meeting & Convention Centre
- 2020 new taxi decree comes into force

2.13.2 Reflection: not all that glitters is gold

The SOS campaign (1990) heats the debate by stating that the goose that lays the golden eggs must not be killed. Tourism is as such not a problem as along as it is not at the expense of the quality of life in the city centre. The historic centre – dixit the initiators – once again reached its limits, not because of an increasing car use but because of an increasing number of tourists and in particular the advent of large hotel chains. Inspired by the Structure Plan (1972), the city council responds with a concentration model for the Golden Triangle (between Minnewater - Beguinage, the Zand and Burg) as presented in a White Paper (1990). The idea was to concentrate tourist-recreational activities (including shopping) in this area. This way, the city council explains, the residential function could remain the focal point in the other neighbourhoods of the inner city. The same motivation is later used to implement a ban on new hotels (1996) and a ban on newholiday homes (2002). Both times, policy makers fear that these functions would disrupt the housing market.

It can therefore be viewed as a sign of real bad faith when certain critics wanted to make the residents of the Sint-Anne quarter believe that it was the intention to sacrifice their district for the sake of tourism.

Witboek van een Beleid – De inzet voor een leefbaar en leven Brugge, 1990

It is therefore hardly a surprise that the new strategic vision paper on tourism (2019) focuses on 'better' rather than 'more'.

Today, there are three times more visitors than inhabitants at absolute peak times in the so called 'egg' with a surface area of 4.4 km². This happens particularly in holiday periods and at weekends at the same locations and at the same times, more and more for just a few hours. Awareness is growing among residents, entrepreneurs as well as visitors that urban tourism reaches its limits in terms of capacity. Bruges was way ahead of its time in terms of taking measures to keep the impact of tourism manageable, for the sake of its inhabitants and with the mind-set that what is good for inhabitants is also good for visitors. As a result, Bruges is now in no way comparable to the other cities that suffer from permanent excessive pressure from tourism. With smart management, we want to keep it that

way and make adjustments if necessary.

The mobility policy has to ensure that the Bruges' dream (see also chapter 2.12) did not turn into a Bruges' nightmare. Tourists are welcome but undesired effects are combated. Tourism also has to respect the scale of the city centre. When translating this idea to mobility planning, this implied a policy choice of keeping coaches out of the city centre. In 1981, tourists were only allowed to disembark at the Market Square and had to embark at the Katelijnepoort where a car park was constructed near the Bargeweg. In 1995, a general access prohibition for coaches that drop tourists off or pick them up at a hotel in the city centre.

The development of a cruise terminal (2018) is also part of the ambition to channel the influx of tourists. Cruise ships with an average of 3,000 tourists on board provide 'hit and runs' on the historic centre without much added economic value. This is in stark contrast to congress attendees for example. Et voilà: the raison d'être for the construction of a new exhibition and congress centre which started in 2019.

Despite the strong growth in the number of ships and passengers in recent years, the number of cruise ships in Zeebrugge remains stable this year, something the Burgomaster of Bruges, Renaat Landuyt (sp.a), does not mind. 'Thus far, most ships are moored for only one day, which is just enough time to discover Bruges and buy some souvenirs. If more ships arrived, there would be a risk that we wouldn't be able to handle the tourist flow', Landuyt says.

De Tijd, 12/06/2018

Although the question may arise whether a more critical reflex would be beneficial for all 8 million visitors per year. A detailed analysis on modal split (how do tourists arrive in Bruges?), the pressure on the parking organisation and the lack of possible solutions (e.g. are visitors willing to park at a distance, to use Park&Ride or do shopping visitors prefer to park under the Zand?) could be very useful. The current policy seems also to be more demand-driven (although above-mentioned examples show that it can be done). Considering the expected growth in tourism, additional policy research in this regard seems opportune.

And as for the future, the Bruges city council follows the implementation of the new Flemish taxi decree (2019) with caution. Will taxi services such as Uber flood the city centre and continuously drive on the circulation loops to attract customers?

2.14 Trains

2.14.1 Time series

- 1838 opening 'iron road' between Ghent and Bruges (and later that year in the direction of Ostend)
- 1844 opening neoclassical station building (which can now be admired in Ronse) at the 't Zand
- 1862 opening of railway line Bruges Blankenberge with (a first for Belgium) doubledecker trains
- 1886 new station building neo-Gothic style
- 1899 strategic decision to construct a new station
- 1935 opening of new railway track on the border with the then municipality (nowadays borough) Sint-Michiels
- 1938 opening third station of Bruges (actual train station)
- 1948 demolition of the old station at the 't Zand
- 1955 closure of Bruges Sint-Michiels station
- 1983 new railway line between Bruges and Knokke (due to the opening of the inner port)
- 1985 electrification of the railway line Bruges-Kortrijk
- 1987 last train ferry departs in Zeebrugge (a service whiwh was started in 1924)
- 1996 redesign of Stationsplein, including expansion of bicycle parking and realisation of a Kiss&Ride-zone
- 1998 Plan Neutelings (masterplan) for the station area
- 2007 new buildings creating a second façade to the train station square
- 2009 widening renewal of railway underpass (with shops, new lifts and escalators) and platforms
- 2009 opening of the administrative centre 'Kamgebouw' (hosting both regional and federal administrations) the Sint-Michiels side of the train station once a "back side" receives an upgrading to a fully-fledged entrance
- 2013 second Kiss&Ride zone (Sint-Michiels entrance)
- 2014 closure of Zwankendamme station due to the construction of a train shunting station
- 2014 direct connection Bruges–Brussels–National Airport (from 2017 onwards also during weekends)
- 2019 start construction of third track Bruges Dudzele (works are estimated to be finished in 2024)
- 2019 approval of the master plan for the station area (final phase of the urban development project)
- 2020 approval of the cooperation agreement between the Bruges city council and Roads and Traffic Agency (AWV) to tackle the black spots on the R30 / realisation of a landscape bridge

2.14.2

Reflection: wind in the sails, current against

The story of the buses in Bruges already showed (chapter 2.2) that the idea of a 'transit city' was already a fainted memory after the second world war. Due to a lack of long-term data sets, it is difficult to make firm statements. It is however without questioning that trains experienced the same swan song as buses. It is also a fact that there has been a renewed focus since the 1990s, again with growth figures. However, it would take until 2011 before the train passenger numbers returned to the level of the 1960s. Just at that moment, a new economic crisis unfortunately broke out so savings had to be made. Politicans were relucant to choose for sustainable modes of transport (and hence abandon a more car-oriented policy).

The NMBS's figures do not lie: while passenger transport by car increased by 265% between 1960 and 1977, the number of rail passengers dropped by 23.3% in the same period and the overall market share of passenger transport decreased from 24% to 10%. Lastige Bruggeling, 1979, vol. 6, issue 3 The story of the train passengers may be a story of ups and downs, the train station never lost its prominent role, yet on the contrary. The construction of a station car park, the concentration of high school in Sint-Michiels adjancent to the train station, an urban development project that is halfway finished in 2020, the construction of a Flemish and Federal Administrative Centre and of the Huis van de Bruggeling (the city's administrative front offce) ... The station transformed (and is still transforming) into a station 2.0, at the crossroads of the world of places and the spaces of flows (to: Castells, 2000; van der Bijl & Hendriks, 2010). And this within stone's throw from the Golden Triangle and 't Zand. This role will only increase in the coming years with the roll-out of the Basic Accessibility Decree (with the train network as the top layer and with a prominent role within the core and supplementary network), the further development of the urban development project (including the expansion of the station car park) and the ambition to build a landscape bridge untangling the traffic knot.



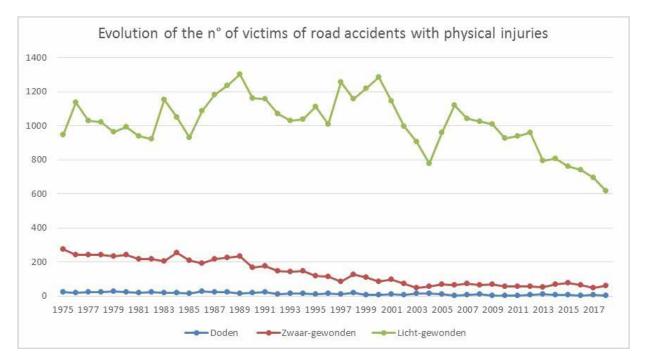
2.15 Road safety

2.15.1 Time series

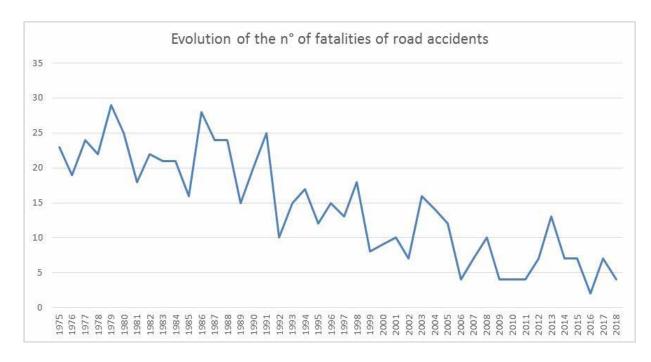
The following time series does not aim to be complete. Milestones regarding road safety can also be found in other chapters (such as the story of the N31). Nevertheless, the series clearly shows the evolution of the policy, particularly in combination with the accident data. The emphasis is mainly on the 'engineering' aspect rather than on 'education' or 'enforcement' (cf. 3E model).

- 1960 mandatory technical vehicle inspection (national law), opening of inspection station in Bruges
- 1972 national television broadcasts 'Veilig verkeer', (predecessor of 'Kijk Uit'), a TV programme on road safety hosted by national police lieutenant Alex Van Wanzele
- introduction of the circulation plan
 "Figures showed that 33% less accidents were recorded in the city centre of
 Bruges compared to the corresponding period of the previous year, in the same
 period, the number of accidents at the Zand decreased by 62%"
- 1979 publication of the Dutch report 'Aanpak verkeerongevallenkoncentraties' (which only achieved attention on a large scale in Belgium in the 1990s, e.g. via the traffic accident handbook 'Handboek Gebruik Ongevalsgegevens', 1992, and was later translated into the study on black spots 'TV3V zwarte punten')
- 1981 (?) so-called turtle action ('schilpaddenactie' a plea for slowing traffic down) leads to the creation of neighbourhood committees, e.g. in the Malehoek (a borough in Sint-Kruis)
- 1984 Minister Herman De Croo declares 1984 as 'the year of road safety and quality of life'
- 1986 foundation of the Belgian Institute for Road Safety (BIVV, nowadays Vias Institute)
- 1987 introduction of the authorised supervisor ('gemachtigd opzichter' a person, very ofen a volunteer, who can regulate traffic (to some decree) e.g. at school entrances, enabling children to cross a busy street) via a new Royal Decree
- 1990 approval of the Traffic Liveability Plan
- 1990s road safety is high on the (political) agenda due to weekend accidents
- 1994 first bi-flash installations at school environments in Bruges (orange LED-lights which alternate light up to indicate a potentially dangerous situation)
- 1996 evaluation Traffic Plan (1992)
 Since the introduction of this plan, the number of accidents has fallen to approximately one fourth. The number of accidents involving cyclists even decreased by 36% and in 30 km/h zones by more than 40%.
 Brugsch Handelsblad, 4/4/1996
- 2001 the draft Flanders Mobility Plan is stipulated by the Flemish Government with, among other things, the objective to reduce the number of fatalities by more than 50% by 2010 compared to 1999
- 2002 the Flemish Minister of Public Works selects a list of 809 traffic unsafe 'black spots'
- 2003 start of action plan 'Gevaarlijke Punten' by the Flemish government, see e.g. chapter on the N31
- 2015 Bruges signs the SAVE charter
- 2016 a white bike appears after a fatal cycling accident on the Expressway (and later also on the Scheepsdalelaan)
- 2017 fatal accident involving a six-year-old child gives rise to the action plan on safe school environments
- 2018 'moordstrookje' (murder lane a small patch of the road, merely indicated by some paint, where cyclists has to ride) is the word of the year in Flanders

2.15.2 Accident data

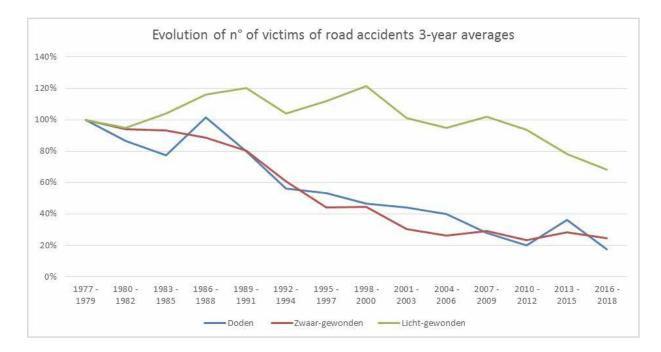


source: annual reports National Institute of Statistics (own editing for the territory of the city of Bruges)

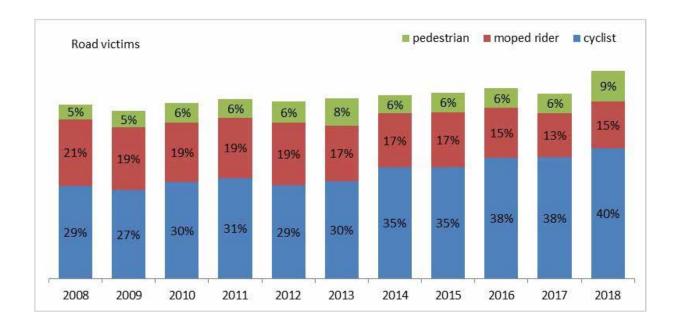


source: annual reports National Institute of Statistics (own editing for the territory of the city of Bruges)

80



source: annual reports National Institute of Statistics (own editing for the territory of the city of Bruges)



source: Bruges local police (own editing)

- 2018 Bruges is the first city centre to obtain the SAVE label and is a pioneering through the SAVE 2.0 project
- 2018 pilot project (a first) with winged zebra crossing, elaborated by the AWV and the local police of Bruges
- 2019 the city council gives green light to study of 'dangerous accident locations', as an implementation of the SAVE charter that examined 23 red and black spots in Bruges
- 2019 publication of a new dynamic list of black spots by the Flemish government, weak road users are given a higher weighting coefficient of 1.7

2.15.3 Reflection: from an (almost) absent policy to a

reactive policy

"A single death is a tragedy, a million deaths is a statistic." The words of Soviet Union dictator Joseph Stalin comprise an inconvenient truth. Not only for a dictatorship but also for the failing or rather the absent road safety policy after the Second World War. There are not even reliable statistics until 1976. Seemingly a matter of non-communication between the gendarmerie and the police, but above all an indicator that traffic accidents are a non-issue, a so called side-effect of King Car ... the price to be paid for this 'progress'. The attention to this dark side of the medal grew gradually throughout the 1970s and 1980s. Also in Bruges, where the Expressway, also known as a 'death trap', becomes the symbol for a lack of (attention on) road safety. Action groups give the many victims a face and a personal story.

"Are you really sure this plan will reduce the number of road casualties?" somebody recently asked Transport Minister Dehaene. "Look," he replied. "Every week we have as many deaths on our roads as during the Heysel Stadium disaster. It is a traffic battlefield. And that's what the traffic peace plan wants to fix. With more safety for pedestrians and cyclists thanks to 30 km/h zones. [...]

BIVV, 1990, Verkeersslagveld of Verkeersvrede?

Following initiatives of the national government, road safety became more prominent in the late 1980s and early 1990s, with among other things increasing media coverage of the so called weekend accidents. This is also the case in Bruges and especially in the borroughs. Thanks to the 'Traffic Liveability Plan' plans are made to tackle problems in 45 streets and intersections. The starting point is the concept of the 'self-explaining road', i.e. the idea that a good design supports a correct (and therefore safe) use of the road. The road speed limit translates into adjusted (narrowed) lane widths, downgrading crossings and kerbs, introducing speed bumps ... with as a result a clear downturn in the statistics, partly thanks to the general speed reduction from 60 to 50 km/h in built-up areas.

Attention to the issue has not faded ever since. Not even at the Flemish level, where a 'black spots' programme was launched in 2003. The government strives to tackle 809 dangerous accident locations, spread over Flanders. Also in Bruges, which had 21 black spots and where the project serves as a lever to deal with dangerous accident locations on the Expressway N31 and the area around the station area on the Sint-Michiels side. It is a long-term project that continues until 2018. And in the meantime, a series of new black spots 'emerge'. The Flemish Government therefore expresses a resolute commitment to "tackle the shame of the 400 [deaths]". A new dynamic list has been published annually since 2018.

In the Bruges City Hall, attention to the issue has not faded either. For example, the accelerated implementation of the 30 km/h zones in the early 2000s ensured that ideas such as the 'self-explaining road' from the 'Traffic Liveability Plan' was adopted throughout the entire territory. 30 km/h zones become the standard in the residential areas of Bruges. Special attention is paid to school environments, especially after a fatal accident at a school gate in 2017. The new action plan 'Veilige Schoolomgeving' examines all 138 school gates in Bruges.

In 2015, the Bruges city council is the first large city to sign the SAVE charter of the vzw Ouders van Verongelukte Kinderen (non-profit organisation Parents of children involved in accidents). With its own list of black spots, the city accelerates its efforts, supported by a traffic psychologist the SAVE 2.0 methodology is developed to draw lessons from these accidents.

And what will the future bring? Perhaps a more proactive policy. Thanks to the pilot project SAVE 2.0, the city administration works on a road safety reflex. New plans discuss for example the theme of 'traffic safety' more thoroughly. In addition, the regional mobility plan may offer an opportunity to relieve the traffic pressure created by the neighbouring municipalities and especially the pressure on the access roads and shortcuts in the borroughs.

2.16 Legislation – speed

2.16.1 Time series

- 1899 first national Traffic Law
- 1910 speed limit of 15 km/h in city centres and 40 km/h outside city centres
- 1924 general speed limit is removed (the possibility of special speed limits remains)
- 1934 New Traffic Regulations, decision for a disciplinary traffic system
- 1968 Road Traffic Act
- 1975 new Traffic Regulations (still in force, albeit with numerous amendments)
- 1977 City Council decision for a general speed of 60 km/h in the agglomeration of Bruges
- 1978 Ganzestraat as the first 'woonerf' in Flanders, speed limit 20 km/h
- 1988 30 km/h zone is defined in the Road Code, at that time linked to strict design regulations ('the infrastructure of roadways must be designed in a way that the speed does not exceed 30 km/h in the entire regulated street or zone').
- 1990 the Traffic Liveability Plan selects residential areas that could become a 30 km/h zone as a matter of priority
- 1990 BIVV brings out a conditional favourable advice on the request to install a 30 km/h zone in the city centre of Bruges and in Lissewege
- amendment of the Road Code with more attention to cyclists and pedestrians
- 1992 in the entire country the speed limit in built-up areas is reduced from 60 km/h to 50 km/h
- speed adaptation on regional roads in line with the (then) recently adopted vision 30/50/70 and 90 as the proverbial exception (albeit under a storm of protest)
- 1992 the second Circulation Plan implies the implementation of a 30 km/h zone in almost the entire city centre
- 1992 30 km/h zone in the centre of Lissewege and several streets in the borrough Sint-Jozef
- 1993 30 km/h zone is implemented in 10 streets in the borroughs
- 1994 first bi-flash lights at school environments (e.g. Astridlaan, Generaal Lemanlaan and Spoorwegstraat), this means the implementation of a dynamic zone 30
- 1995 policy ambition to extend 30 km/h zones in the borroughs
- 1995 extended 30 km/h zone in the borroughs (including Sint-Katarina neighbourhood).
- 1996 pedestrians are given way at a zebra crossing
- 1997 the Flemish government publishes service instructions regarding 'pedestrian crossings', in Bruges this is used as an opportunity to get rid of zebra crossings ... although this is partly scaled down due to protests
- 1998 30 km/h zone in Zwankendamme
- 1998 conditions for 30 km/h zones become less strict, the call to implement 30 km/h zones in the borroughs increases (advocated by citizens, committees and politicians)
- 2000 30 km/h zones implemented in 34 additional streets/neighbourhoods
- 2003 in implementation of the Mobility Plan, a plan is esthablised for the roll-out of of 30 km/h zones in all of the residential areas
- 2003 start roll-out of speed cameras at various intersections, first cameras in Bruges at Gentpoort and Katelijnepoort
- 2004 further easing in the selection criteria of a 30 km/h zone
- 2004 30 km/h zone is implemented in 44 additional streets/neighbourhoods
- 2005 a new Ministerial Decree stipulates that all school environments should be located within a 30 km/h zone
- 2007 approval planning for the further roll-out of 30 km/h zones (time horizon 2011)
- 2008 30 km/h zone is implemented in 25 additional streets/neighbourhoods
- 2017 $\,$ in Flanders, the speed limit outside built-up areas is reduced from 90 km/h to 70 km/h $\,$

2.16.2 Reflection: how legislation can both act as a restrain and an incentive

ONCE UPON A TIME THERE WAS ... MOVEMENT

We only had [early 20th century, author's note] to deal with the pushcarts and wheelbarrows of craftsmen and merchants and we saw them coming from far away. There were no cars driving through the street. When it did happen, it led to a general outcry.

Achille Van Acker, Minister of State and father of Frank Van Acker, 1964, Herinneringen

First bicycles, at a local level, and later and in particular cars [...] led to the arrival of a new traffic concept. [...] Traffic behaviour before the advent of bicycles and cars was predominantly reactive. Road users do not have to be in a safe position before they encounter the road: after observing an oncoming vehicle, there was still enough time to react and take in a safe position. With the advent of fast motorised traffic, traffic behaviour had to become an anticipatory matter. Cyclists always had to keep a safe position. By the time an oncoming vehicle was detected, it was already too late to react. Weber, 2010, De blijde intrede van de automobiel in België

The speed of the first cars necessitated a new perspective on traffic and by extension the organisation of living together. The new Traffic Regulations was forced to opt for a disciplinary traffic system in 1934. The separation of traffic flows was the result.

The government had to be able to take action against motorists and other road users in order to safeguard public roads. [...] There was also a clear hierarchy: pedestrians had to stay on the pavement [...] If there was no cycle path, cyclists were allowed on the road, but only on the right-hand side and in a line.

Weber, 2010, De blijde intrede van de automobiel in België

Discussions on speed limits would fuel the public debate for more than a century. While car drivers' freedom used to tip the balance towards high speed limits, the aspect of 'road safety' tilted that balance at the end of the 20th century once again. Especially in built-up areas, where cyclists and pedestrians are the so-called weakest road users. In 2005, the Federal Minister of Mobility (and later Burgomaster of Bruges) Renaat Landuyt calls for a generalised roll-out of the 30/50/70 principle. The exception of 90 km/h on regional roads initiated – unintentionally - a storm of protest. It would eventually take until 2017 before the idea became a reality.

Huge clear-cut in Traffic Forest. [...] The speed limit changes constantly when driving from Bruges to Gistel for example. You have to keep your eyes on the signs rather than on the road. That is very stressful and dangerous. [...] We must create a legal framework in order to extend the principle of speed zones to the whole of Flanders. The condition is that there should be a logic behind it: motorists have to sense in which zone they are driving so to speak.

Minister for Mobility, Renaat Landuyt, 29/05/2005, Het Nieuwsblad

In Bruges there is no uniformity at all regarding speed limits. Along the Baron Ruzettelaan, motorists are not allowed to exceed 50 km/h when driving from the Katelijnepoort to Steebrugge bridge. In the other driving direction the maximum speed is ... 60. There are numerous traffic signs with the unusual "75 km/h" on the Gistelsesteenweg in Sint-Andries. [...]

Burgerwelzijn, 21/04/1992

ONCE UPON A TIME THERE WAS ... THE IMPLEMENTATION OF 30 KM/H ZONES

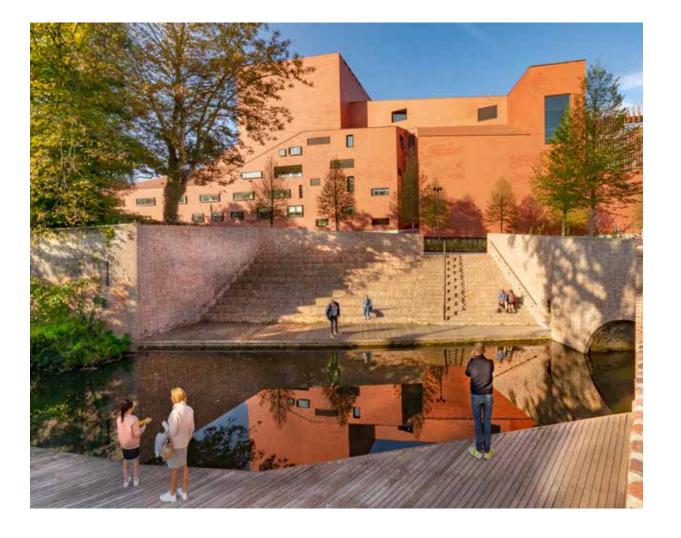
However, 30 km/h zones lead to the most discussion. After its introduction in the Road Code in 1988, the city council quickly picked up the idea. As early as 1990, the Traffic Liveability Plan calls for a city-wide implementation of zonal speed limits in the residential areas on the edge of Bruges. However, strict criteria hinders such an ambitious roll-out. The Bruges city centre is dealt first, thanks to the narrow mediaval streets and the circulation plan that combats cutthrough-traffic (1992). After just one year, the number of accidents decreases by 25%.

The entire city centre of Bruges is clearly a large residential area with a very finely-woven street pattern in a beautiful historical setting. The area certainly qualifies to become a 30 km/h zone [...] The diameter, which ranges from +/- 1.8 km to 2.4 km and lies in the maximum magnitude of 30 km/h zones [...] Moreover, motorists are not intended to cross the entire city centre but should instead use the (outer) ramparts as much as possible. [...] Over the last two decades, the city of Bruges has made major efforts to redesign streets and squares. [...] By redesigning the fairly intact medieval street pattern on a human scale, we can say that the city centre of Bruges is already 1 large 30 km/h zone and acts as such. Only the legal ratification is still lacking.

[...] In my opinion, the current traffic situation at the Market Square is not adapted to a 30 km/h zone at all. The middle of the square is used as a parking area around which one-way traffic can circulate in no less than 3 lanes. [...] I believe that the Market Square should evolve from a traffic square into a residential square, which is worthy to be the heart of Bruges. [...] Car traffic circulates in the Bruges city centre while following a kind of loop system. Normally, these loops are not connected to each other but they all cross the Market Square, thus making them interconnected. The implementation of 30 km/h zones may be an opportunity to separate these loops by drastically reducing the traffic function of the Market Square. BIVV, 1990, Zone 30-advies voor de Brugse

binnenstad en de woonkern van Lissewege

Encouraged by Study and Action Committees, the city also implements the first 30 km/h zones in the borroughs in 1993, albeit with the proverbial handbrake on due to strict criteria. It would take until 1998 before less stricts requirements were approved. In 2003, the city council took the strategic decision on a roll-out in the residential areas. The result? Following a federal directive, 30 km/h zones are implemented in all school environments in 2005. It involved quite a bit of work: 41 additional regulations, 264 traffic signs, 30 green zebra crossings and 70 Octopus poles (a first in Flanders). The story proves that there are many practical challenges between dream and reality. But persisting pays of : in 2011, 30 km/h zones were the standard in most residential areas in Bruges.



2.17 't Zand

2.17.1 Time series

- 1837 opening railway line Brussels Ostend, opening train station at the Vrijdagmarkt (adjacent to the Zand)
- 1886 opening newstation at the 't Zand
- 1899 agreement to construct a new station outside the cities' ramparts
- 1937 competition to redesign the Zand (anticipating the relocation of the station)
- 1948 demolition old station
- 1950 layout of the square draft Special Plans of Development (BPA) Hoefijzerlaan station
- 1954 construction of a ring road on the old railway track (Hoefijzerlaan)
- 1954 the square is transformed in a parking lot
- 1954 draft Special Plan of Development (BPA) West Bruges
- 1972 Structure Plan, the 't Zand is playing a paramount role in the centrifugal parking vision (estimated parking shortage at this spot: 1,000 cars)
- 1976 strategich decision on the tunnel under the Zand and a low-traffic square
- 1977 Special Plans of Development neighbourhood study of West Bruges
- 1980 implementation of one-way traffic in the Smedenstraat as part of circulation measures accompanying the realisation of the new square
- 1983 opening tunnel (started in 1979)
- 2002 construction concert hall, extra square wall facing the Zand
- 2018 redesign of the Zand, also the first phase of the redesign of the King Albert park
- 2018 new circulation plan West Bruges including cut H. Consciencelaan
- 2020 start of works expansion of the underground car park the Zand 2nd phase ing redesigning the King Albert park



2.17.2 Reflection: 't Zand is mirroring the mobility policy

Few places fully grasp the essence of the mobility policy as the Zand in Bruges. The story reads like an illustration of the CREATE framework:

- until the middle of the 19th century, the 2.4 hectare sandy terrain was used for public executions and the weekly horse and cattle market on Fridays ... a walking city.
- when in 1838 the railway connection Ostend –
 Brussels makes a stop in Bruges, the square becomes the home of Bruges' first and later second station ... a transit city.
- when the station moves to its current location in the mid-20th century, the station and railway line were replaced by both a double lane road (part of the Bruges ring road) and the Koning Albert Park ... a car-oriented city, the square is merely more than a parking lot.
- in 1979, the ring road goes underground and the square becomes a square again, a square bordered by the concert hall (2002) which is being redesigned in 2016 – 2018 ... a city of places.

The Zand not only tells the story of an evolving vision on mobility but also of how mobility choices can have a major impact on the functioning of a city. It is a story of threats, for example by cutting off and socially isolating the West Bruges neighbourhood, as well as of opportunities, for example by boosting the catering businesses. The Zand does not only reflect how spatial planning and mobility are inextricably linked. Reflecting the story of Bruges. Reflecting the potential destructive / constructive forces unleashed by policy choices.

In the short term [mid-19th century, author's note] the existing Capuchin Monastery, south of the Vrijdagmarkt was demolished and the adjancent Rei [historic waterway, author's note] arched. In the longer term, West Bruges began to live on its own and thus became isolated from the city centre. Vandewinckele, 1983, 't Zand te Brugge The expansion of the railway network ensured that Bruges became less isolated and brought many tourists to the city. In 1838, the railway line Ghent-Ostend with a stop in Bruges became operational and in 1844, the first Bruges neo-classical station building was inaugurated at the Zand, only to be replaced in 1879 by a megalomaniac neo-gothic station with the style of a cathedral. Due to its location, hotels, shops and restaurants moved from the Vlamingstraat to the Zuidzandstraat and Steenstraat, therefore making the station the starting point for a visit to the city. Not only the carriages departed from there but also travel guides started their walking tours at this spot. Tapis-Plein vzw, 2005, B-Tours – Over Brugge, toerisme en beeldvorming

The wound of the old railway line healed very slowly [in the mid-20th century, author's note] and the construction of the ring road on the railway track made the scar more severe. A few decades later, a new way of thinking was needed for the growing traffic volume. In 1979 – 1982, serious ideas to redesign the square were taken into consideration. Following the proposal of Group Planning, an underground car park and a tunnel were constructed. [...] In order to achieve this, a busy, complex car park had to be redesigned into a town square, which also served as a transport hub for public transport.

Demulder & Beernaert, 2016

3 A CITY-WIDE EVALUATION

88

It is a mistake to solve traffic problems by trying to adapt the road infrastructure. Only the symptom is tackled, not the root cause behind it. The urban fabric of old cities cannot be adapted to traffic. Old cities (like elderly people) usually die during such surgical operations. The causes of traffic must be changed and remain limited. Structure Plan, 1972

When strawling through the archives of Bruges, numerous quotes can be found that could easily have been said by Jan Gehl, Jamie Lerner or other progressive contemporary mobility thinkers or urban planners. This is hardly surprising since Bruges' mobility policy – or at least the one for the city centre – has consistently advocated the human scale over the last half century. A phrase such as "traffic must adapt to the city (and not vice versa)" appears both in the Structure Plan (1972) and in the most recent Mobility Plan (2016). The underlying vision always focuses on the city in a plurality of meanings: as a collection of buildings, squares and streets (an urban landscape) but also as a collection of people.

In this part we define how Bruges has put the mobility policy into practice in the city centre, how Bruges (cf. CREATE framework) interpreted the concept of 'city of places' in its own way.

3.1 On a human scale (objective)

Bruges is a water city. [...] Bruges is a masterly mosaic of small-scale plots of land, engraved on an organic street and water pattern with houses as its fine-grained basic module. The city was designed and modulated over the centuries, not for cars but for pedestrians, not for office buildings and large-scale functions but for housing, not for large industrial and commercial concentrations but for small-scale shops and crafts. As a result, Bruges has remained true to the human scale to this day. Structure Plan, 1972

Bruges of course can relay on its historic legacy. The medieval city centre was spared from the construction of Haussian boulevards. Its city centre has been designed in such a way – or better, has grown so organically – that 'pedestrians' can be described as the preferred 'vehicle of choice' in traffic jargon. Within its morphology it is impossible to fit cycle paths hence mixed traffic in a 30 km/h zone seems to be the most evident choice.

After all, even the non-profit organisation Langzaam Verkeer [today known as Mobiel 21, author's note] probably won't be able to find better speed reduction measures than the oldfashioned and completely outdated city gates in Bruges where traffic passes almost at a walking pace on one lane. [...] No, nothing is as contemporary as the medieval structure of this city, that is for sure. Well, let's take good care of it. Van Hove, Brugge Word Wakker, 1992

These dimensions came under attack in the 20th century due to motorised traffic, which introduced speed and its own culture of movement (see Weber, 2008 and 2010). This created distance which conflicts with the very nature of the city, namely bringing people together. Putt differently: cars led to an erosion of city life, of social and optional activities specific to the city (see Gehl, 2010 and Appleyard, 1982).

Apparently, we forgot that integration and cohesion, interaction and mixture, contact and solidarity are more important for human well-being than spatial disintegration, distance and alienation. [...] Good cities are sometimes highly irrational in structure compared to the modern demands for efficiency and rationality. Real life values are often obtained by the unforeseen and the unplanned. The best cities are like the greatest parties: no one really planned them in advance and that is why they are so pleasant.

Wonen of Wijken?, 1978, Tanghe et al

The mobility policy that had been taking shape since 1972 restored the city by putting people back at the centre. In the 1980s, this was explicitly based on the 'living street' concept. Bruges was the pioneer of Flanders' woonerf and the implementation of the concept of a pedestrian zone. No witch-hunt on cars, but a clear statement instead: cars are guests here, pedestrians are the standard. Or according to Jamie Lerner (2014): the car is our "mechanical mother-in-law", we have to maintain good relations with her but we can't let her dominate our lives ... we have to know how to coexist withouh becoming a slave.

It is essential for shopping centres to be built within a city zone and not a pedestrian area in the narrow sense of the word. Just as in living streets, "rare" motorists must clearly be made aware that they find themselves in a situation where people mainly get around on foot.

internal note from the Department of Heritage Conservation and Urban Renewal, 1977



image with title "where do people stand in the emingly ever-increasing rush we experienced these last decades", in: Wonen of Wijken?, 1978, Tanghe et al.

3.2 On a city scale (starting point)

Surely we cannot be accused of chauvinism when we call our city the treasury of our country and one of the most extraordinary European cities in terms of art history.

Frank Van Acker, 1987, Het verkeersbeleid te Brugge en het wegslepen van voertuigen

Whereas in the Netherlands a series of fatal traffic accidents (cf. 'Stop de Kindermoord' - English: Stop the Child Murders) paved the way for a new mobility policy, in Bruges this was the decay of the city. Or better: the (imminent) attack on the cityscape. The imminent demolition of historic buildings gave rise to the Marcus Gerard Foundation. The chairman of the foundation, Andries Van den Abeele, was Bruges' first alderman for urban renewal and commissioned the preparation of the Structure Plan. Group Planning that had experts such as Professor Lemaire incorporated the principles of the Unesco Venice Charter (1964) into this plan for Bruges. The Structure Plan (1972) put Bruges on the international map. The proverbial icing on the cake was an international symposium in 1975, the European Year of Architectural Heritage. This is when the Resolutions of Bruges ('Basic principles for the renewal of the historic city') were approved:

- Cities are the basic elements in the built environment of man. They mirror his social existence and convey the diversity of its culture, its history and its traditions. They form the life blood of local communities, express their identity and give man a compass in time and space.
- 2. It is above all in historic towns, whose structure, fabric and traditions is strongly embedded, that modern man finds the most potent visual link with his roots in the past. [...]
- 4. This legacy has been threatened with such imminent destruction [...]
- 5. Nevertheless, historic towns must be saved. Their human scale, their beauty, their richness, [...] are increasingly recognized as something irreplaceable by modern man [...]
- 8. Historic towns can only be preserved within the framework of city and regional planning programmes. [...]
- 9. The preservation of the historic town necessitates its adaptation to the requirements of contemporary life; this must however be done in such a way that its fabric, its structure and its history are not destroyed. [...] The preservation of the authenticity [...] is one of the basic objectives of its conservation.

It is striking in these and other texts that the city is not seen in a narrow sense. Not as a collection of buildings but as a cityscape. And the buildings are always seen being associated with streets and squares.



The complete landscape is important, not only the monuments or valuable houses. Structure Plan, 1972

But that is not everything. This cityscape gives – cf. Resolutions – a collective expression of and for the people. Talking about the city is essentially talking about urbanity as a quality, and therefore about human coexistence (e.g. see the White Paper 'De eeuw van de stad' (2002) published by the Flemish government). The urban landscape is also a collective memory of mankind (Halbwachs, 1950), which in the case of Bruges even belongs to the Unesco world heritage.

And let's not forget that the people who built the city made history and gave meaning to life between the houses, not the stones.

Caestecker & Keppler, 1983, Brugge: straten en pleinen

People did not rely on architects and designers. They were less worried about "whether the Urban Planning department would give its permission". [...] People knew the rules of the game: the rules of social life and those of building and living. [...] Building was a community act: mutual involvement was business as usual in a society where, due to scarcity and need, people needed each other [...] People built house by house, from person to one another, and therefore the question of managing (e.g. by making strict rules on) the relationship between inhabitant and dwelling, between citizen and urban development did not occur. The people were a "means" of support to each other and their constructions expressed this sense of commonality. Wonen of Wijken?, 1978, Tanghe et al

Hence how (safeguarding) a city like Bruges embodies the origin of the term 'city'. To draw on a Greek source:

The origin of the city is to be found in the fact that we do not severally suffice for our own needs but each of us lacks many things. As a result of this, one man calling one another for one service and another for another, we, being in need of many things, gather many into one place of abode as associates and helpers, and to this dwelling together we give the name city. Plato, The Republic

In this context, the Structure Plan (1972) quotes the words of Esher:

A city is not a work of art. It is shaped by human activities and in turn shapes them. [...] we must do our best to understand them because our plans will fail to work if we study a town as a mere arrangement of streets and buildings.

Filip Canfyn (son of Willy Canfyn, one of the founders of Group Planning and citizen of Bruges) comes to a similar conclusion in his master's thesis 'Een analyse van het gegeven stad en van het proces Stedebouw' (1983) in which he looks back at, amongst other things, the policy of Bruges:

The city can fundamentally be a spatial entity, a locus. However, the city gains its essential importance by being a unique social field, a focus. Indeed, the city is an essential element of society [...] Urban development is primarily a spatial process, in which urban space is used as a matter but gains its essential importance as a social process.

This analysis shares the view of sociologist Sennett (2018) who points out the distinction between 'ville' and 'cité' in French. It is the distinction between the city as a physical place and the city as a mentality, a collection of perceptions, habits and beliefs. Rossi also endorses this distinction (Rossi, 1966 & Sanctorium, 2006) between the 'female' city (polis, civitas, la città), which evokes fusion, recognition, cohesion, merger with the collective, while the 'male' city (urbs, oppidum) seeks control, overview, logic, strategy, manageability. Translated to the world of traffic experts: it is the difference between a street and a road, between staying and being, between a 'world of places' and a 'world of flows', between departing from the place or the path (from: De Urbanisten, 2018).

3.3 On a street scale (means)

The street, and by extension the public space, turned out to be the key to activate the city of Bruges (as defined in a multiple means). The Bruges' perspective on 'space' is an oriental perspective on 'space'. A view similar to the (Japanese) concept of 'mà' that could be translated as 'the meaningful empty space'. Mà is the pause between two musical notes that determines the rhythm and intensity of the musical piece, the dramatic silence that an actor can drop between two words ... In the city, it is the interaction between mà and mass (buildings) that determines the quality of the public space. Close your eyes and imagine the Market Square or Steenstraat and then imagine a newlybuilt neighbourhood ... Not only specific buildings come to mind, instead you especially imagine the whole, the urban atmosphere, a 'special sense of life' and where buildings are 'egoless' ('no inner contradictions, no restlessness').

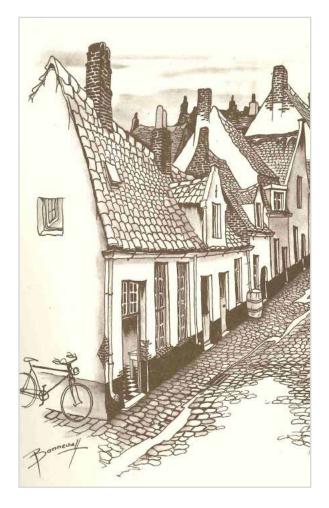
(Alexander, 1979; Calvino, 2013 & Slabbinck, 2016)

The true reality of a room is not its walls but the emptiness they contain. Lao-tzu, 6th century BC

The building with its "urban façade" is part of the "urban space", this is the space between the buildings. [...] The urban space is the citizen's living room and must be developed in such a way that it offers an answer to all possibilities. The elements that make up the urban space are: o the street and square pattern [...] made for people, not for cars. Pedestrians and cyclists should fundamentally have priority o the waterways and canals [...] o the trees, parks, squares and ramparts. Structure Plan, 1972

Think of the city as a stage for – what pioneer Jane Jacobs described as – the ballet of the street (1961). The street is not only an unbuilt space but also a social living environment (Weber, 2008). In the historical city centre no anonymous roads indicated bynumbers and letters, but streets referring to the social walk and talk in the city. The street names in Bruges refer to public buildings, crafts, inns ... to the big and small stories of the city and its inhabitants.

The street! It was so lively at the time [early 20th century, author's note]. For me, it was a world on its own. [...] There was a lot of solidarity, which one typically finds among people who are having a hard time. The greater the burden and the danger, the greater the solidarity. [...] The inhabitants were the ones who made the law for a lot of things. Not the police. In many cases the street would



not have tolerated this. [...] We only had to deal with pushcarts and wheelbarrows of craftsmen and merchants and we already saw them coming from far away. There were no cars driving through the street. When it did happen, it led to a general outcry. [...] The front door consisted of two halfdoors, like stable doors. The upper half was always open during the day.

Achille Van Acker, Minister of State and father of Frank Van Acker, 1964, Herinneringen

The street used to be the core of a neighbourhood - a meeting place where people gathered. This has changed completely due to moving traffic and parked vehicles. Instead of being a binding element, the street has become a barrier to human relationships. The car has clearly contributed to the fact that people live more side by side. [...] However, the tyrannical traffic threatens to recreate this valuable cityscape in a chaotic situation [...] in fact, it is a process of deterioration in quality. Frank Van Acker, 1987, Het verkeersbeleid te Brugge en het wegslepen van voertuigen

It is therefore no surprise that reclaiming the street and by extension the public space became one of the focal points when the city was rehabilitated.

The enormous development of mobility [...] led to a tearing dichotomy between 'mobility' and 'living space'. The horizontal floors and vertical façades of the city became two separate worlds. Because from now on, living was restricted to the space behind the façades and the street was reserved for mechanical traffic. [...] The 'genius loci' disappeared in favour of a monotonous standaardized cityscapecityscape, 'une machine à habiter'. Tanghe Jan & Keppler Ulrich, 1986, Mobiliteit en Ruimtelijkheid, in: Ruimtelijke Planning, afl 16, hf 2d

Streets were widened, asphalted and 'modernised'. Medieval streets and city walls had to make way for the ring road, squares were converted into car parks and pedestrians saw their space reduced to a few tiles against the façades. Traffic piled up and the city became its prisoner. People were no longer in charge, instead car drivers ruled over the city. Caestecker & Keppler, 1983, Brugge: straten en pleinen

Highlights in the Bruges policy are the development of several car-free squares, the redesign of streets with cobblestones (and recently with sawn natural stone such as granite for a better cycling comfort) and the layout of wide pavements (and recently also 'shared space' layouts). It is sometimes said that cobblestones are less comfortable than asphalt. If it is for a short stretch, perhaps fitted carpet could get the job done instead of asphalt. No, to be serious now, we impose quite strict standards for the restoration of house façades and rightly so. We also have to be consistent and create regulations in terms of the so-called street cladding because after all, paving and house façades form one unity.

Burgomaster Van Acker in Brugsch Handelsblad, 27/04/1979

Throught the urban planning regulation (1989 – 'stedenbouwkundige verording' in Dutch), the city ensures that garage doors can only be used in façade segments of at least 12 m in length. This way, the city ensures that the edge of public/built space is and remains articulated and open, and therefore adds to the cityscape (see also Alexander, 1977 and Gehl, 2010).

But that is not everything. As Gehl (2010) states, a city on a human scale should strive for a "full management of the human dimension" in which "the battle for quality is on the small scale". Bruges kept this in mind as well. Stating"the details make the difference" – quote White Paper, 1990 – Bruges combats the car-chitecture through:

- the creation of a "new atmospheric street lighting by installing 2,000 authentic Bruges lantern" in the 1980s to replace "the many immense ugly neon tube lamps that clashed with the typical cityscape";
- and the introduction of a municipal regulation in 1983 on advertisements, inscriptions and other publicity materials to combat "the visual pollution."

That reflex is ingrained in the Bruges DNA. For example, at the end of the 1970s, the city did not choose to implement parking meters (per car park), but instead opted for ticket machines since these – quote Regulation 25/08/1978 – "don't or barely ruin the cityscape". In 2019, moveable bistro chairs appeared in the parks of Bruges. And in 2020, the city is considering to install drinking fountains.

Small interventions can change the atmosphere of the city enormously. Consider it as urban acupuncture. Small elements that set a positive tone in the city. I mentioned the terraces in the side streets earlier. [...] The aldermen do not longer park their cars under the trees at the Burg square. We placed extra benches. There is a purpose behind it. It brings tranquillity and atmosphere. Burgomaster Landuyt, Brugge Meemaken, 2015

It is clear that the Bruges policy is not a call for a nostalgic stand-still. A preservation of Bruges as if it were a city frosen in time. On the contrary: it is about preservation through development and vice versa. The core problem of historic Bruges is a dialectic between "preservation" and "renewal", a "tension" between "existing structures and forms" and "new contents".

Structure Plan, 1972

3.4 Mobility policy as a means (not an objective)

[Our philosophy] is that no measure may violate the historic character and that our traffic policy must be conducted with unprecedented respect to the city centre's structure.

Frank Van Acker, 1987, The traffic policy in Bruges and towing vehicles

A city – and certainly a city like Bruges – should not adapt to traffic, but the other way around. There is no other option. Evaluation report on traffic circulation plan, 1993

Traffic and the modes of transport must adapt to the character and size of Bruges. Mobility Plan (2004)

The city council always believes that traffic must adapt to the characteristic city centre, not the centre to traffic. Mobility Plan (2016)

For already five decades, the Bruges model for the city centre relies on the consistent choice that looks at the street as a residential space rather than a traffic space. A traffic policy is therefore a means and not really an objective on its own.

There is a strong interdependence between the strict traffic problems on the one hand and the urban, historical, socio-economic and ecological aspects on the other hand.

(former) traffic officer Roger De Bree, Bruges City Police Department, in: Structure Plan, 1972

By the way, the Bruges traffic policy should not be seen on its own. It is simply part of an overall vision to increase the entire quality of life in the city centre. [...] Bruges is still an oasis and we should take care of it as much as we can because tranquillity is something that will be priceless for future generations. [...] That is why we insisted on a traffic plan, that is also why we decided to redesign streets with cobblestones, that is why we allocated budget to install lanterns, benches and soon fountains and to create new greenery ... Burgomaster Van Acker in Brugsch Handelsblad, 27/04/1979



However, this is a medal with two sides. The choice for residential quality over quality of traffic has concrete consequences in terms of the STOP traffic-perspective:

 Pedestrians and cyclists have/had to deal with the inconvenience of cobblestones. Since the Materials Memorandum (2016), the initially very strict position had weakened and the choice for natural stone allows a win-win for heritage care and cycling/walking comfort.

Perhaps women who wear stiletto heels would complain a bit when they get stuck between the cobblestones in Bruges. However, one must suffer to be beautiful, the city as well as women.

Burgomaster Van Acker, in: Nieuwsblad, 16/03/1978

Some think that we design roads to meet the needs of cyclists. Those people are mistaken, we apply a stricter criterion: women on high heels must be able to walk on the road surface. Flat stones instead of rounded cobblestones. Burgomaster Landuyt, 2018, Verder met Brugge

- The relationship between buses and the city centre can be seen as a tricky marriage. Buses are a necessary alternative to cars but preferably in

the form of compact vehicles (i.e. with reduced capacity) with an environmentally friendly engine. And preferably as few as possible, which is proven by the disappearance of the regional routes in the city centre, followed by tourist coaches and – within the implementation of the Basic Accessibility Decree– the growing vision on a distinction between city routes (intra muros) and suburban routes (extra muros).

- Bruges is so beautiful because it has not adapted to heavy transport. Buses are the ones that have to adapt to the city, and not the other way around. The structure of the city gives us an advantage in the fight to make cities liveable again. We hold the future in our hands by cherishing the past. Renaat Landuyt, 2012, Met Goesting
- Cars for residents are seen as a necessary evil. It explains the decision for a low-traffic (but not car-free) city centre. Although one can see a tendency to prevent tourists from parking (for extended periods) in the city centre as much as possible, initially through a blue zone, later through more expensive paid parking with parking alternatives in the periphery.

However, we have also remained idealists. The slogan 'ban cars within the city' comes across well



but according to our personal opinion, it is rather a utopia. After all, urban traffic is a function of activities. [...] That is why the traffic circulation plan [1978, author's note] also wanted to promote the vitality of our city in order to have a balance again between the once sacrified street space and traffic keepingthe interests of the citizens, city visitors and pedestrians in mind.

Frank Van Acker, 1987, Het verkeersbeleid te Brugge en het wegslepen van voertuigen

We don't implement this parking plan for the joy of it. We implement this parking plan purely to solve problems. There are not enough parking spaces so we have to make choices. Residents cannot find a parking space in their street or neighbourhood, leaving them frustrated. The most recent parking counting from 2015 confirm the many complaints. In certain neighbourhoods in the city centre, the parking pressure is very high, between 80% and 100% and even more. High occupancy levels lead to more traffic searching for a parking space, which we absolutely want to avoid, and its also means that people who have to be in the area have little apportunity to reach their destination on time. Burgomaster Landuyt, Brugsch Handelsblad 20/01/2017

3.5 Structure planning (as an instrument)

3.5.1 Structure planning as an alternative to mobility planning?

This total picture forms a complex social problem. It can therefore only be solved by an interdisciplinary and integrative approach, which leads to a synthesis and not to the solving of partial aspects. This integrative approach is a sharp contrast with the current administrative structures, which are in fact characterised by a lack of coordination and synthesis, and where "the component" and "immediate implementation" still seem to be more important than "synthesis" and "philosophy".

Structure Plan, 1972

The role of the Structuurplan (1972, with a capital "S") cannot be overestimated. Thanks to the methodology of a structure plan (written with a small "s") Bruges opted for an approach that can best be described as holistic. Holism meaning that 'the whole is more than the sum of its parts'.

That is why we are convinced, now more than ever, that in a city – and a fortifiori in Bruges – improvisation cannot be the inspiration of a policy. We believe that this speed of decision-making can only happen with a minimum of errors, when one took a long time in advance to consider all the basic elements that make up the complex whole of a living city, and on which one has built a coherent vision for the present and the future. The Structure Plan for the historical city centre derived from this awareness and conviction.

Burgomaster Vanmaele, 1972, in the foreword of the Structure Plan

The result [of the structural planning, author's note] was a search for a different philosophy on the use of the city, with respect for the continuity of the existing. In concrete terms, the structural planning process formulated a development model for the city centre [...]

Management Plan, SumResearch, 2006

In short, structural planning goes beyond sector planning and beyond facet planning.

The Bruges urban renewal policy is based on the philosophy of the structure plan and is an example of urban renewal aimed at a restructuring process in a historical city. This restructuring process was mainly based on an aesthetic vision and architectural concerns.

This urban renewal policy is not the result of the housing problems of residents in old working-class neighbourhoods, which characterises urban renewal projects in the Netherlands, nor the result of a need for economic resurgence, which is why urban renewal projects is needed in Wallonia.

Urban renewal policy in Bruges, Bruges city council, 1980

Structural planning transcends the STOP principle (which can be linked to the 'sustainable urban mobility planning' model) that only sees the street as a part of the traffic network. Instead, a Structure Plan provides an integrative framework and considers the street as a means of connection. It builds bridges between the street as part of the traffic network, the street as a stage for the architecture – the cities' façades and the street as a space in itself.

3.5.2 Structural planning as a framework for a 'city of places' model?

In the context of the CREATE framework, one can say that 'structural planning' conforms to the spirit of a 'city of places' model. In fact, one could argue that structural planning is a methodology for pursuing a 'city of places' model.

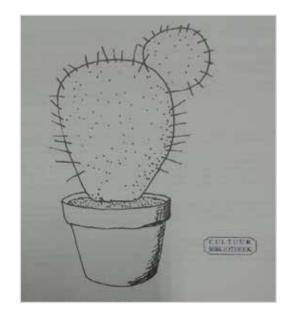
A theoretical elaboration on 'structural planning' is opportune here. A detailed analysis can be found in Canfyn (1983), who attributed three characteristics to "structure thinking" as an instrument:

- Structure thinking is a 'geological' method: social data and processes are stripped of at first, reveiling not only their visible and superficial appearance and but also evaluating their underlying relevance, their essential-social reality [...].
- 2) Structure thinking is a 'socially engaged' method [...].
- Structural thinking is an 'analytical method': social data and processes are mirrored to the three essential levels of society being the economic, political and ideological level.

This is a STRUCTURE plant:

- Must be handled with care;
- Even a slightly wrong movement will be punished with punctures;
- Wait for months without doing anything and then sprinkle abundantly with (participation) water to grow fruits (i.e. flower);

- Blooms very rarely, but looks good in the house, especially on a windowsill facing the street
- Then people will say: what a beautiful little



© Canfyn, 1983

Structural planning is a systemic approach that aims for a global approach for the entire city, placing each component and each sub-problem in relation to the whole (Group Planning, 1988). Structure planning is thus opposed to modernist thinking, which approaches a problem as if it were a machine. One can then – in such a modernist view - study and repair a defective part, separately from the larger whole. In this light, a bicycle problem can be solved with a cycle path. A speed problem with a speed bump. This way, a modernist reasoning sacrifices the synergy of the whole for the efficiency of the individual parts (Cathorpe & Fulton, 2001).

The enormous development of mobility, the rise of engineering sciences and the evolution of certain technological specialisations – including the construction of bridges and roads which became an autonomous specialisation – led to a tearing dichotomy between 'mobility' and 'living space'. The horizontal floors and vertical façades of cities became two separate worlds. Because from now on, living behind the façade had to make way and the street was reserved for mechanical traffic. Tanghe & Keppler, 1986, Mobiliteit en ruimtelijkheid

Thus, a philosophy needs to be developed [...] This philosophy is based on the relationships between things, gives rise to an urban planning pattern with a smaller scale, with more pitches and rhythms, with adapted façade openings, with continuous façade walls. [...] Preservation, rehabilitation and remediation are not necessarily the opposites of renewal, change and growth. Wonen of Wijken?, 1978, Tanghe et al

3.5.3 In search of the fourth dimension of the city

The context as a starting point is crucial in this structural planning process. And in particular the uniqueness – the character of the city, also described as the 'fourth dimension of the city' (Tanghe & Keppler, 1986). After all, the challenge ahead is not to turn every city into Bruges. Or to turn Bruges into Copenhagen. The task is to make each city a better version of itself. How Bruges can become a better Bruges.

All of the researchers of the city merely look at the structure of urban artefacts,. Although they also had to recognize that beyond these elements there still existing something we can refer to as the soul of the city ('l'âme de la cité'), the quality of urban artefacts. [...] that the city is constituted as a whole and that this wholeness is its raison d'être. Hense the researchers have left the significance of the structure they had glimpsed unexamined. Rossi, 1966, The architecture of the city

This search for the soul of the city, the genius locus, fits seamlessly with the vision of the Venice Charter (Unesco, 1964) and the Resolutions of Bruges. They label the city as a collective memory of a people where the landscape is expressed by architecture (after: Rossi, 1966). There are few cities that evoke such a strong image and even an emotion as Bruges. Or it should be Victor Hugo's Paris, who wrote this about the Notre Dame:

L'architecture est le grand livre de l'humanité, l'expression principale de l'homme [...] Les plus grand produits de l'architecture sont moines des oeuvres individuelles ques des oeuvres sociales, plutôt l'enfantement des peoples en travail que le jet des hommes de genie, le dépôt que laisse une nation ; les entassements que font les siècles ; le résidu des évaporations successives de la société humaine.

Victor Hugo, Notre-Dame de Paris – 1482, 1831

Rodenbach is – in this regard – also right when analysing:

Les villes surtout ont ainsi une personalité, un esprit autonome, un caractère extériorisé qui correspond à la joie, à l'amour nouveu, au renoncement, au veuvage. Toute cité est un état d'âme, et d'y séjourne à peine, cet état d'âme se communique, se propage à nous en un fluide qui s'inocule et qu'on incorporere avec la nuance de l'air Rodenbach, 1892, Bruges La Morte

To him [Georges Rodenbach] the city is much more than a background: the city is a character, a fellow player who influences the thinking and behaviour of its inhabitants. The buildings, the canals, the bells have put a spell on them. Rodenbach undeniably succeeded in his intention to make Bruges the main character of his novel. Vanheste, 2002, De stad is woord geworden

Note that city architects such as Delacenserie have been rigorously guarding this image of Bruges since the late 19th century, for example by propagating neo-Gothicism as the 'official Bruges style'. In 1877, a grant scheme for 'Artistic Restorations' was established (Tapis-Plein, 2005 & Capelle, 2001). And the 'Commission for Urban Beauty', founded in 1904, have safeguarded this in numerous projects since then.

This cenacle of good taste ensured that every renovation and every new construction in the city centre met the standards of the Bruges building norms. With the best intentions in mind, Bruges was professionally protected against Art Nouveau, Art Deco, New Objectivity and Modernism.

Ryckaert et al, 1999, Brugge – De Geschiedenis van een Europese Stad,

over de oprichting van de Commissie voor Stedenschouw

Just like the writers Rodenbach, Jean-Jacques Rousseau and Goethe, contemporary films such as 'In Bruges' (2008) also contributed to this image of Bruges. The multiple interpretations of the concept of a 'city' was thus given an extra dimension in Bruges, namely as a (main) character as such. The city – in the language of Rodenbach and Voltaire – as ville, cité and as histoire (both story and history).

The city is an instrument that allows itself to be played by others over and over again, constantly changing but always true to itself. Herman Herzberger, in: Structure Plan, 1972, Recapitulatie

In summary: (an analysis and synthesis of the) context as the ultimate key to make the transition from a sectoral SUMP model to a holistic 'cities of places' model. The mobility policy is dead. Long live the urban policy. Interesting to point out that the Structure Plan stated (as a boutade) : "cities are no longer built since there is urban planning".

3.6 Synthesis: the concept of 'city-friendly mobility'

The origin for this study lies in the European Civitas Handshake project. On the basis of an initial quick scan of archive documents, the State of Affairs of this project labelled the Bruges' mobility policy as a 'city-friendly mobility'. A concept defined as follows (Slabbinck, 2019):

A city-friendly mobility, i.e. a mobility policy

- which fits to civic life, creating few externalities, especially respecting the historic fabric ('DNA')
- which supports civic life, e.g. guaranteeing accessibility – freedom to move / wander / stroll / ...
- which attributes to civic life in the city and its suburbs, e.g. stimulating recreation-tourism by bike

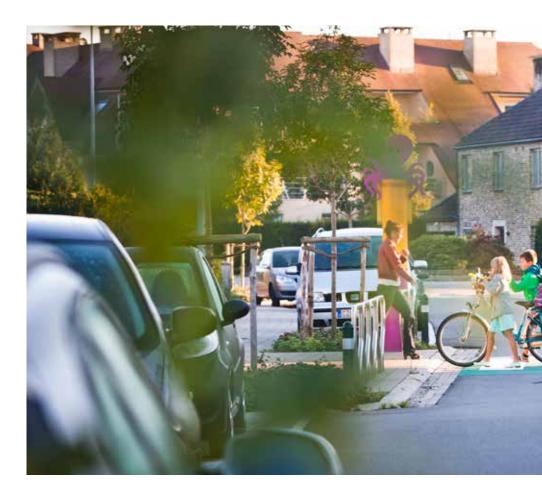
Additional archival research confirms this analysis. Although the definition focuses on the result rather than the objective – the core of such a policy. Building upon the above-mentioned analysis, it is therefore better to define 'city-friendly mobility' as follows: A city-friendly mobility is a policy which celebrates the city

- as a collection of buildings and places (streets, squares, ...) 'ville'
- as an expression of people 'cité'
- as a living memory of people and their society 'histoire'.

If Jan Gehl advocates the adagio "life, space, building ... in that order" (Gehl, 2010), then the Bruges mobility policy opts for a trinity "the Bruges trinity: street, buildings, city(scape) in that combination".

The building with its 'urban façade' is a part of the urban space [...] This space is universal. It is used by children and the elderly, by families and singles, [...] People work, celebrate, mourn, live and die there. The urban space is the citizen's living room and must be developed in such a way that it offers an answer to all possibilities. Structure Plan, 1972

Although both share the human scale as a common denominator, the policy in Bruges' city centre is more in line with Alexander's vision (1977 & 1979) than Gehl's (2010). Although both coincides strongly. The policy in Bruges very closely follows what Alexander describes as a 'pattern language' in his classic 'The Timeless Way



of Building' (1979): "a language which allows its users to create an infinite variety of those three dimensional combinations of patterns [...] but overall, throughout the differences, there is a constancy, a harmony, created by the repetition of the underlying patterns.". Close your eyes and think of Bruges. Think of squares such as the Market and Burg square. Think of streets such as the Geldmuntstraat or the Lange Rei. Think of buildings such as the Provincial Palace and the Sint-Salvator Cemetery, but also think of the typical Bruges crow-stepped gabled houses (Dutch 'trappengevel'). They are all characterised by such a 'pattern language'. A big contrast to the borroughs of Bruges, where the notorious brick in the stomach lays the basis for a typical Flemish amalgam of architectural styles, planted down along a street where the STOP principle was often interpreted as the POTS principle.

Architects may have to create new things, they have to renew. They have to let the city, which in two hundred years' time will look very different from what it is today, florish and grow. But they also have to respect the continuity of its character, they have to remember that they work within a specific placewith its own cultures and traditions which has lived and existed in Europe for at least hundreds, sometimes thousands of years. Jean Fourastié, quoted in: Structure Plan, 1972

3.7 A procedural interlude: triggers for a transition

Saying that Bruges' mobility policy changed course in the 1970s is an understatement. The Structure Plan introduced a new perspective on the city. The policy leapfrogged from a 'car oriented development' to a 'city of places' (see chapter 1.7.1). Such a change of policy can be described as a paradigm shift with a series of catalysts (see chapter 1.1) such as the merger into a Greater Bruges and completing the ring road. We have not seen such a quantum leap ever since. Nor was the clock turned back. And when it rained in the city centre, it also driplled in the borroughs. This chapter therefore examines in-depth the factors that contributed to this success story of Bruges, with special focus on the Bruges city centre and the 1970s and 1980s (based on the guiding role that the Structure Plan had).

3.7.1 The triggers for Bruges

The story of Bruges is not unique. Look at cities such as Leuven and Ghent: they recently made a quantum leap as well thanks to the introduction of ambitious circulation plans. Or take a look at Copenhagen and Amsterdam, two cities that changed their strategy in the 1970s. Each



time, a 'tipping point' – dixit the CREATE project (Jones, 2018) – was preceded by a 'trigger' (or a series of triggers). In Amsterdam, for example, this was the theme of road safety ('Stop de kindermoord/Stop Killing Children').

Triggers play a very important role in a city's transition from one policy perspective to another. They can be 'internal' to the city, arising from the consequences of the current dominant policy perspective, or may originate from 'external' sources, due to national or international economic and social factors.

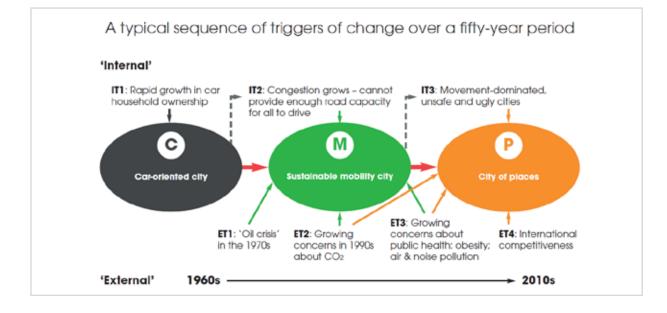
Studying the tipping points in Bruges' mobility policy show that external triggers (such as a global energy crisis or climate crisis) didn't really play a role. Mainly internal triggers initiated a change of direction. In the 1970s – in the city centre – a new mobility policy was introduced. The cause was the city council's (absence of a) heritage policy and the pressure on the historical city centre. Thus, the traffic model in the Structure Plan (1972) initiated the leap from a 'car oriented city' to a 'city of places'. In the 1990s and 2000s – mainly in the borroughs – traffic liveability came under pressure. Road safety became (as elsewhere in Flanders) a local challenge. This resulted in moving from a 'car oriented city' to a 'sustainable mobility city'.

The fact that transitions in Bruges' mobility policy start with internal triggers does not mean that the Bruges policy is an isolated story. On the contrary.

The internal trigger was always a reaction to an 'externality' of car use and, by extension, modern society. The Bruges mobility policy was not a policy against cars but one in favour of the city (from the 1970s to the present day for the city centre), one for more traffic liveability and safety (from the 1990s to the present day, particularly for the borroughs).

- The internal trigger was always inspired by external sources in the broad sense:
 - Buchanan's work had a strong influence on the then leading generation of policymakers from the 1970s to the early 1990s. It is not only the Structure Plan's discourse that was influenced. The Traffic Liveability Plan (1990) that initiated a road hierarchy for the borroughs, the second Circulation Plan (1993) and also the stalemate in terms of the N31

 opening up Zeebrugge (cf. the idea of a multiple ring road structure around Bruges): they can all be linked to Buchanan's work 'Traffic in towns' (1963);
 - For example, progressive actions in Amsterdam often proved to inspire the (emergence of a) critical civil society in Bruges. 'De Groene Amsterdammer' got a little brother in Bruges called 'De Lastige Bruggeling'. Study trips inspired a mobility working group to emerge within the infamous Cactus-club (which even originated in the aftermath of the infamous May 1968).



3.7.2 The ingredients of a tipping point

But why did 'triggers' in Bruges led to a change of direction, while other cities such as Leuven or Ghent only had a similar change years or even decades later? And why did other, often smaller, cities not change direction at all, despite the fact that issues such as a lack of road safety are just as prominent there?

The fact that Bruges managed to reach a 'tipping point' had a lot to do with a successful combination of policy preparation and implementation. Between experts (both internal and external) and policymakers. In the 1970s and 1980s, there was a strong synergy between the local

police (with traffic officer and later chief commissioner De Bree), the city administration (with deputy town clerk Dirk Michiels) and the Group Planning office (with experts such as Professor Tanghe), which delivered numerous studies.

When reading interviews and articles of these policy makers, it is striking that no actor is restricted to a classic division of roles. No researchers who should 'only' limit themselves to making analyses without making statements about strategic – and thus – political choices. No police officer who should 'only' be concerned on tasks such as guarding, maintaining the decisions made in the strict sense and distancing

THE DUAL ROLE OF SUPRA-LOCAL AUTHORITIES

While internal triggers in Bruges took the policy to the next level, the Bruges mobility policy can of course not be studied without taking the policy context of the higher government authorities into account. This is a story of accelerating and slowing down on several 'fronts'.

The legal framework proved to be both an opportunity and a threat to an ambitious mobility policy. The introduction of 30 km/h zones provided an ambitious area-wide exercise for example. But those who pioneer often test the limits of the legal framework and will inevitably reach them sooner or later:

- When in 1975 (City Council, 31/10/1975) Bruges was the first Belgian city to introduce parking spaces for people with disabilities, this was declared unconstitutional by a judge "on the grounds that all Belgians are equal before the law".
- For more than two decades, cyclists in Bruges were forced to comply with the circulation plan that favoured cars until there was a workable legal framework for 'limited one-way traffic'.

The same mixed story can also be noticed in the institutionalisation of the mobility policy. Until the early 1990s, the supra-local mobility policy was limited to a traffic policy and even to an infrastructure policy. Thanks to the regionalisation of powers, the Flemish government seized the opportunity to introduce an expanded discourse. Bruges was given a Mobility Plan and even a mobility department. At the same time, this also meant a compartmentalisation of the mobility policy in a sense. A pioneer like Bruges, who started from a more holistic structural planning method, had to take a step backwards – especially in regards to the city centre. Though in general it was by no means a negative story. Regionalisation led to a rediscovery of public transport in the early 1990s. The new transport company De Lijn found a perfect partner in Bruges for a pilot project. The free fall in the number of bus passengers was stopped and the company itself started to grow again.

Finally, the Bruges policy cannot be isolated because of the (guiding) role of the supra-local infrastructures. This is also a story of opportunities and threats. Opportunities because initiatives such as the ring road coming full circle (1960s and 1970s) and the elimination of black spots on the N31 (2000s and 2010s) created unique opportunities for an increased traffic liveability in the city centre and Sint-Andries/Sint-Michiels respectively. Threats because (at least until the late 1990s) such a 'car-oriented policy' was top-down in the borroughs (see 1.7.2).

oneself from making or also defending these decisions. On the contrary: police commissioner Debree was even the public face of the 1993 circulation plan and was aware of the choices that had yet to be made by attending numerous information evenings.

First and foremost, I would like to thank Professor Jan Tanghe. [...] he held the pen for the whole team and many of his thoughts and beliefs have therefore spontaneously found their place in this text [...] The second essential member of the working group was Professor Raymond Lemaire who played an irreplaceable role in the design of this structure plan: his exceptional national and international experience and his ability in syntheses were indispensable. The general philosophy of the Structure Plan owes him a lot. [...] Alderman Andries Vanden Abeele, in Structure Plan,

1972

A former editor of our magazine once made a list of your character traits: dynamic, jovial chief of police, fluent language skills, undisputed organisational talent, no lack of self-confidence, in support of cobblestones and of every burgomaster, [...]

Lastige Bruggeling, 1981, vol. 7, issue 7 – interview with police commissioner Debree

Equally striking is the fact that the support among local policymakers was cross-party. Even after a political landslide in the 1976 elections, the ideas from the Structure Plan, such as the traffic model, was embedded in the new policy. As a result, the mobility policy can be described as a-political (certainly until the 2000s and this at a strategic level). The question was not whether a change of direction was needed, but which steps were needed and, above all, how quickly (the latter resulting in the pragmatic 'transitional scheme').

Despite the fact that alternative coalitions were formed after the then CVP majority, the key aspects of the structure plan remained the guideline of spatial policy, both for the city centre and for the region, albeit from alternating political emphases.

Desimpelaere, 2005, Brugge: Het sloganeske voorbij, in: B-Tours

There are several explanations for statements saying that the mobility policy in the city centre is apolitical.

- Mobility policy choices were always based on a solid, objective foundation:
 - o both academic (cf. research Buchanan but also the link with Unesco statements);
 - o and as a result of a consistent 'to measure is to know' attitude at a local level, in which policy choices are substantiated with figures

both before (ex ante) and after (ex post). For example, Bruges was probably the first Flemish central city with a traffic model for the city centre (1972) and the borroughs (1990), Flanders' first origin-destination research probably took place in the Bruges region (1964) and parking pressure research has been carried out since the 1990s at regular intervals in the city centre and the periphery.

According to calculations of the European Union, the traffic flow increased by 50% between 1980 and 1995. If no measures are taken regarding the distribution of means of transport, traffic would have increased by 33% by 2010 compared to 1998. [...] Every citizen with common sense knows that this is impossible. That is why we must act now, if we want to avoid a drastic "anti-suffocation plan" in the future. That is why the City Council opts for the current mobility plan. Because without measures, the city centre of Bruges will soon be congested again.

Patrick Moenaert, 2003, presentation Mobility Plan

 Policy choices regarding mobility start from broad-based visions – principles that transcend a (narrow) mobility policy (cf. the holistic concept of 'city friendly mobility').

Finally, we would like to make it clear that traffic and transport are derived from other functions. They are means and end in themselves. [...] This also means that the traffic problems must be placed within a vision that opts for social urban renewal, combining urban functions, etc. Bonneure et al, 1982, Blauwdruk voor een verkeersleefbaar Brugge

- Policy choices regarding mobility are not choices 'against' for example cars, but choices 'in favour of' an attractive city centre, 'in favour of' a liveable residential area ...
- Policy questions regarding mobility (and the Bruges policy tout court) were often handled by a bottom-up approach or initiated (for example by the Marcus Gerards Foundation, by Fietsoverleg Brugge ...):
 - action groups (in the broadest sense) that start from a specific problem and not from a party-ideological point and thus tapping from a broad social miscontent;
 - action groups (in the broadest sense) that often act as a school for policymakers. This is how the later burgomasters Moenaert and De fauw learned the tricks of the street in local action groups. These action groups also brought politicians – and people of all

backgrounds tout court – together. After all, action groups could be described as pluralistic. For example, De Last Lastige Bruggeling had a journalist and a priest as its most active members. And the Koning Albertlaan Committee consisted not only of representatives (quote press release, 1984) of the Bruges Interests Group for Cyclists, the Study and Action Committee Sint-Michiels [ACW department and thus CVP-affiliated, author's note], the parent committees and boards of two schools, but also of city councillors of the political parties CVP, VU, Agalev, Brugse Democraten and SP.

With even more nostalgia I remember an action at night and together with my friend Herman Valet from Jong CVP, I went to the Steenstraat with a paint pot and brush to paint little bikes on the road surface. Moenaert, 2012, 100% voor Brugge

The Structure Plan is a perfect example here as well. Also and above all because a structural plan process goes against the idea of a final state plan that characterise the regional plan (Dutch : 'gewestplan') and numerous other spatial plans. The structure plan is – in the words of former alderman Vanden Abeele – as shooting towards a rotating target, drawing energy to what Mumford (1961) described as the inexhaustible adaptability of cities.

This Structure Plan is not a fixed-determined plan but a 'thinking model', an 'urban planning philosophy', an organic plan that is never finished and leaves room for many initiatives and a stimulus for a steady and dynamic development.

Vanden Abeele, 1976, Bruges Structure Plan, three years later

Bruges' mobility policy and the Structure Plan in particular can therefore be described as a typical example of 'joint fact finding'. A policy process that focuses on interfaces rather than differences. Interfaces such as the love for the historical city centre and the common policy ambition for a safe traffic system ...

Therefore, for heaven's sake, let's stop with such anti-campaigns which put Bruges at stake. They could irrevocably damage the reputation of our city and question its hospitality. What we need is a consensus on the further development of Bruges, one that we all support. We therefore need to have dialogue and for our part, the door is always open. After all, we can only give this beautiful city a wonderful future together, in consultation. With all of you together strong for Bruges! Frank Van Acker, introduction in Witboek van een Beleid. 1990 And that is perhaps the greatest strength of the 'structural planning' instrument: it captures the ratio and the dream in such a joint fact finding exercise called Structuurplan (with capital "S" stating its importance – in Bruges the printed publication is referred to as the Yellow Bible, not only referring to its yellow cover). Through imagination, through a vision for the future and with respect for the past, starting from the present.

A structure plan is not a determined plan that is fixed but rather a 'development model', a 'thinking model', an 'urban development philosophy'. A structure plan is organic, i.e. never a finished product. It stimulates a steady and dynamic development. Structure Plan, 1972

103

Concluding remarks Urban Cycling Institute

In a time when mobility innovations, the threat of climate change, and public health hazards are sending shockwaves through transport practices in cities worldwide, planners are asked to reconsider fundamental questions about our cities and the future for how people get around. One way to reflect on the repeated calls for transformation in our urban transport systems is to examine the policies, plans, discourses, and practices of the past – and to incorporate key lessons into the discussions of the present.

Historical and archival research, as completed by this thesis, is a welcome pathway to illuminate lessons, from this case of Brugge, Belgium, one of the most charming cities in the Low Countries. Beyond a guided historical account of every major traffic plan, policy, and mode of transport, the reader also gleans insights into the effects of organizational structure, the intersection with urban planning, and the politics of moving a city that balances the needs of residents and visitors. Relevance of these subjects are afforded to nearly every city in the world.

The theme here that transects the above aspects of city-making points to a deep appreciation for scale: the human-scale, the city-scale, and the street-scale. Synthesising these factors leads to the main lesson of this research: the concept of "city-friendly mobility" (section 3.6). This concept highlights a change in mindset around mobility. Mobility is not only the effective movement of people and goods, but a collection of policies that celebrates the city as an assemblage of buildings, streets, people, and memories.

This research demonstrates at least two noteworthy implications from which many cities can learn. One, the role of the professional transport planner is evolving. In order to realise sustainable mobility, how can a new evolution of transport planners navigate and coalesce differing ideologies, build consensus and more deeply understand how to apply concepts like "city-friendly mobility?" And two, our cities and their streets are not static; in a matter of several years, entire transport networks can alter and shape a new reality. What people, processes, and practices are behind these changes that catalyse a new breed of urban mobility that prizes life, social interaction, commerce and play? Especially in uncertain times, this research shows an impressive intersectionality between history, politics, and a potential future for sustainable urban mobility.

Meredith Glaser Urban Cycling Institute – University of Amsterdam partner European Horizon 2020 Handshake-project

104



APPENDIX 1: BIBLIOGRAPHY

Si hortum in bibliotheca habes, deerit nihil If you have a garden and a library, you have everything you need Cicero

This study could only be made possible by roaming through numerous archives, consulting many publications, speaking to numerous "witnesses" (sometimes in the corridors of the city's administration as well as and particularly through moments of consultation).

ARCHIVES AND COLLECTIONS

- Amsab Institute of Social History
- Archive / Server Department of Mobility, City of Bruges
- Archive Expressed Veilig
- Archive Fietsersbond Brugge Fietsoverleg Brugge
- Archive Jan Tanghe (establishment Group Planning) Bruges Culture Library
- Archive Local police Bruges, Traffic Department
- Archive SAK Sint-Pieters
- Archive Statbel (e.g. for census of inhabitants, reports on traffic accidents, reports on number of vehicles)
- Archive SumProject+SumResearch (Archive Group Planning)
- Library Biekorf (amongst others press archive Brugsch Handelsblad 1977 2002, archive De Lastigen Bruggeling)
- Bruges City Archive

PHOTO ARCHIVES

- Bruges City Archive, its own collection and the collections of J. A. Rau and Brusselle – Traen

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The plan that now is proposed covers a street phenomenon, namely traffic. Streets used to be at the heart of a neighbourhood or of a meeting place where people gathered. This has changed completely due to moving traffic and parked vehicles. Instead of being a binding element, streets have become a barrier to human relationships. Cars have clearly contributed to the fact that people live more side by side. [...] We passionately believe in the meaning of a living city heart, a wonderful ensemble of shops, government buildings, offices, museums, restaurants, services, houses, etc.. [...]

With this words, the than burgomaster launched the first circulation plan in 1978. Six years after the publication of the Structuurplan, the dream of a city at human scal became more and more tangible. Streets and squares being redesigned. Underground parking structures being built. ...

Although the texts of the Structuurplan are half a century old, the relevancy for the current mobility planning discourse can't be overestimated. The plea for a mobility planning respecting the city's DNA is still resonating in the streets of Bruges and the city hall.

This publication tells you the story of that past 50 years. Reconstructing the past. Understanding the present. Inspiring the future.



V.U. Colin Beheydt, algemeen directeur Stad en OCMW Brugge, Burg 12, 8000 Brugge ISBN-nummer 9789081144766