

Car free city centre

In 1996 Ghent created a car free city centre of 35 hectares as a single solution to tackle several of the city's problems: persistent traffic jams, safety of pedestrians and cyclists, energy and air quality, public transport, revaluation of the city centre, attractiveness of Ghent as a shopping centre for the region and attractiveness of Ghent for tourists.



Car free city centre - Ghent

The local authority strongly believed that creating a car free zone would have positive effects on environment, liveability and economy and tourism. Local shops and retail companies initially protested, while environmental and mobility organisations supported the idea. Through an intensive information and participation campaign, starting a year before the actual launch, the borders of the car free zone were established and support grew. It was the first car free zone in Europe of its size.

The car free zone, in combination with the revaluation of the city centre, was, according to some standards, a huge success. Squares and riversides became key meeting points for residents, and the city centre became a safer place for cyclist and pedestrians. This whole reorganisation had an effect on the inhabitants and visitors of the city. Tools such as digital parking guides for cars and apps to stimulate slow transport enabled people from outside

the city to reach the car free city centre easily. They experienced an agreeable, safe and tranquil city, without cars. For inhabitants it reinforced the pleasant character of the city as a place to live and stimulated shopping and night life in their own city. It also underlined the image of Ghent as a shopping centre for the region and a tourism destination. In combination with the Ghent Light Plan which also revalidated the historic centre, in 2008 Ghent received a historic destination National Geographic award.¹ The project focused on a combination of several themes:

- Social: agreeable space to meet and stay;
- Economic: more people shopping and consuming;
- Ecological: less noise, better air quality, lower energy use;
- Safety: safe to walk and bike without any concern;
- Health: lowering the threshold towards cycling and walking;
- Comfort: including repair points for bikes, safe storage, bike hire and route planners.

The sections below set out how the initiative fulfils the key European Commission and STEP UP lighthouse criteria.

Integration of energy, ICT and transport

Energy

Modal shift: the car free city centre, through both restrictions and incentives, encouraged residents and visitors to use more sustainable and lower energy consuming modes of transport (see 'transport' below for more information).

ICT

Digital systems: the scheme is supported by ICT measures, without which it cannot be successfully managed. The only digital system at the time that the project was established was the park guiding system, which indicated the number of free places in the city's underground car parks. Meanwhile, Ghent has changed the old system into a traffic guidance system (2011), which is more flexible and can guide the traffic in and out the city. ICT

¹ <http://traveler.nationalgeographic.com/2008/11/historic-destinations-rated/list-text>

solutions, such as apps, have been created to provide guidance on route planning, real-time information about parking spaces and more.

Transport

Mobility: the main focus of the car free zone is on mobility. Cars were banned from the city centre covering a zone of 35 hectares and large scale interventions were made to encourage changes in behaviour. Restrictions and incentives, including zoning and parking, provided a way to limit and steer mobility from individual car travel towards public transport and cycling. For example, the use of bicycles in the city centre was stimulate, and the car free zone opened up possibilities for new and better cycling infrastructure (for example new cycling bridges in the district). The city of Ghent also stimulates car sharing by supporting Cambio, a national organisation for car sharing.



Cyclist enjoys traffic free city centre - Ghent

Distribution: the car free zone stimulates new businesses like electric boats and delivery services by carrier cycles. Recently Ghent also investigated the creation of a green city

distribution centre which will open up the possibility of distribution for local stores in the city centre by means of more sustainable vehicles (electric or gas).

Replication and scalability

Due to political sensitivities, the replication potential of a car free zone or similar large scale schemes often depends more on political leadership, public acceptance and legal restrictions than on technological barriers. The technical solutions are available on the market, including surveillance cameras, rising bollards, smart card solutions or registration plate recognition. Ghent's initiative has become widely known in Europe and has achieved a lot of attention. In this way it is likely to have played an important role as inspiration to other city politicians and officers, in that it shows that schemes like this can be carried out, with positive results and with public acceptance. A combination of clear and open communication, as well as offering complementary opportunities for mobility (e.g. cycling), is likely to contribute to successful replication.

The optimal geographical scale of a car free zone or similar schemes is often debated and there is not one obvious way to make these limitations. Other similar schemes, such as congestion charging in London and Gothenburg for example, have been highly debated among citizens and between political parties, and the boundaries have been, or are likely to be, altered (London 2013 and Gothenburg likely during late 2014). Because of the complexity of cities, the optimal balance between traffic flows, economic development and environmental protection is very hard to find and the scale will ultimately be decided in local or regional assemblies, often after lengthy debates and disagreements.

Integrated building blocks

The establishment of the car free city centre has involved a number different measures connected to mobility, ICT, energy, business and tourism. Additional measures include repair points for bikes, safe storage, bike hire schemes, a route planner, a park and ride zone to facilitate shoppers from outside Ghent, better public transport, bike lanes towards the centre, a digital route planner for cars and pedestrians, a mobility website (www.mobiliteitgent.be), and facilities for bicycle repair and maintenance.

One way of connecting the different building blocks has been by establishing a 'transition arena' for mobility, in which a group of citizens formulated an innovative view of what transport in Ghent will be like in 2050. This group is now experimenting with specific projects

that will help reach that vision, for example, liveable streets with cars out of the street view, new functions for public space or experiments with more sustainable ways of transportation.

The overall approach of the car free zone has resulted in several side effects. In areas around the centre measures were taken to lower car traffic by simple measures such as one way streets, the creation of loops to stop passing through traffic or 30 mph zones. Some new businesses were created to meet the same ambition, such as electric boats.

Monitoring and reporting

Different indicators demonstrate the positive effects of the car free centre:

- Air quality: monitoring of this has shown significant differences for the parameters black carbon and ultra-fine particles (small particles which are related to emissions from transport). The lowest concentrations of these parameters were measured in the car free zone. In contrast, hot spots are located around busy traffic roads. This confirms a clear link between traffic intensity and concentrations of fine particles. In turn this has a considerable impact on the health of the population, since fine particles are the most harmful.
- CO₂ reduction: these have not been measured yet and there is no monitoring available.
- Number of pedestrians or cyclists at specific points in the car free zone: for example, monitoring has shown that the shopping street Veldstraat has a footfall of 140,000 a week.
- Increased use of underground parking in the city centre.
- Increase in the amount of restaurants and bars in city centre.

The balance between results and investment has been positive since the required financial investment was not substantial; only the costs of traffic signalling were involved.

Key winning elements of success

Political leadership with a long term approach

In 1996, when the car free zone was created, there was no policy for air quality. A political process resulted in the car free city centre, as part of a long term approach to improve Ghent

socially, economically and environmentally. Over time, a Local Policy for Air Quality (2005-2010) was established, in which the city of Ghent stipulated a plan to increase urban air quality and stimulate a liveable, healthy environment using a set of local measures; this was Ghent's first policy for air quality. This policy seeks to reduce the contribution of traffic to the total amount of air pollution, reduce the concentration of finer particles in problem areas with bad traffic, inform citizens about the problem of air quality, and influence individual behaviour and choices in favour of better air quality.

Collaboration and dialogue with all stakeholders

Access restrictions do limit the ability for people and goods to flow freely, so key to achieving acceptance is to combine these kinds of restrictions with incentives and benefits related to the type of mobility that is in line with political ambitions in areas such as climate protection, air quality or congestion.

The creation of additional initiatives alongside the car free city centre, such as bike hire and park and ride routes, has made the scheme more attractive to residents and visitors, and made it easier to engage with different stakeholders.

Promotion of the initiative

The car free city centre of Ghent was intensely promoted when it was installed in 1996. The new mobility plan for the city centre was presented at 18 different informative meetings for various target groups (including citizens, retailers and companies). At the Flanders Technology Fair the new technology of the parking guiding system was presented to companies.

For inhabitants of Ghent the new mobility plan was introduced with the communication campaign "Zit niet in de strop" ("Don't get the rope", referring to the nickname traditionally given to the inhabitants of Ghent). Folders with a city map and a map of the pedestrian area were posted in all houses. The folder elucidated the new mobility plan as well as the conditions and permits for entering the car free zone.

For retailers a specific communications plan was set up to inform and guide them. As well as two informative meetings in the city centre, an evaluation meeting was organised on the pros and cons of the project. Retailers received special guidance and were offered communication materials for distribution amongst their customers. To counteract the concerns that the project would have a negative impact on retail, Ghent's Department of

Economy set up the campaign 'Gent Verwent' (Indulging Ghent) in 1997, which aimed at stimulating shopping in the city centre. Articles in national and international magazines were published to promote Ghent's car free city centre as a shopping area.