

THE GREEN BOULEVARD  
HASSELT, BELGUIM  
CASE STUDY



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Chief Engineer  
and Director of Technical Authorities:  
Mobility Chief:  
Former City Mayor:

**Jean Vandeputte**  
**Peter Vandenberg De Lijn**  
**Steve Stevaert**

The Green Boulevard:

**Vlaamse Gemeenshaap (Flemish Community)**  
**Vlaamse Vervoersmaatschappij (Flemish Transport Company)**  
**De Stad Hasselt (Hasselt City Council)**

Mobility Plan:

**Langzam Verkeer (Slow Traffic) from Leuven**  
**Groep Libost nv (municipal services and research agency)**

## **INTRODUCTION**

**In 1995, a study of mobility within the city of Hasselt in Limburg, Belgium, identified 725 issues and proposed a number of possible solutions. It was initially thought that a third ring road should be built around the city to ease the traffic congestion. However, the then mayor, Steve Stevaert, took an innovative step and instigated an alternative plan: he decided to halt construction of the new ring road and to restore an existing inner ring road to a boulevard.**

**The stimulus for such a radical approach was multi-faceted: the city centre population had declined significantly over time, which led to reduced levels of activity within the area. In addition, there was also a high rate of traffic accidents within the central boundary. These were some of the facts that indicated that the city was in decline and needed a new focus and direction. Against this backdrop, the decision was taken to revitalise Hasselt by redefining mobility and the supporting infrastructure, making it more sustainable.**

**Hasselt signed a 'Mobility Contract' with the Vlaamse Government in December 1996. Leading this initiative was Peter Vandenberg of bus company De Lijn, who spent 18 months planning the network changes.**

**A sustainable Mobility Plan was devised that considered the needs of the current generation without compromising the needs of future generations. It should be pointed out that sustainable mobility is not necessarily anti-car, but is a policy that attempts to reconcile the needs of all traffic users. It considers wide ranging mobility options, allowing people to make more informed choices about how they travel.**

# INNOVATIVE TRANSPORT INITIATIVES

Key to the success of the Hasselt Mobility Plan was the upgrading of the bus service and the reinstatement of the Green Boulevard.

As well as investing in new vehicles for passenger comfort and safety, regular and reliant bus schedules were introduced and the service was provided free of charge. Shuttle bus services were provided from the city centre station, with park and ride facilities available. The fare-free service allowed drivers to focus on customer care rather than on the collection of fares, thereby improving the service. The increased level of service provided visitors to Hasselt with a real alternative to using the car. From the introduction of the bus service in July 1997, passenger numbers increased immediately leading to a 10-fold increase in use.

Interestingly, the quality and dependability of the bus service resulted not only in reduced car usage but, for some people, the bus became an alternative to cycling. This was true for many students who could now travel longer distances comfortably by bus rather than taking a bicycle.

For the Green Boulevard initiative, the inner ring road reverted back to a green-belt strip and introduced improved cycle and pedestrian routes.

## **Economic Considerations**

As yet, it has not been possible to determine how the project is faring in terms of economic return. However, 70% of bus passengers pay only a nominal fare 0.50 Euros resulting in a return of 35% on costs - 10% better than the target figure. However, the aims and resulting benefits to Hasselt of the Green Boulevard initiative are much wider reaching than purely monetary. The city ranks among the highest for car ownership, but with lowest use, and in doing so constitutes a Belgian success story.

### **The Green Boulevard**

A major focus of the Mobility Plan was the Green Boulevard initiative: the conversion of the inner ring road from a four-lane, two-way mobility barrier to a people-focused city centre, incorporating a single carriageway with a tree-lined promenade.

Ensuring smooth traffic flow is central to ensuring the new initiative would be successful. This has been achieved through the better co-ordination of and reduction in the number of traffic lights; underpasses are provided for cyclists and pedestrians to avoid the necessity for crossings.

### **Assessment of Building a New Ring Road**

In determining the best way forward to resolve the mobility issues in Hasselt, the team considered what the possible disadvantages would be of taking a traditional approach and implementing a new ring road.

At the time, Hasselt had the worst traffic accident record in Limburg. In addition, public transport did not run to timetable and so was an unreliable alternative to car use. Building a new ring road would lead to a reduction in the surrounding green-belt, while trees would need to be cut down to widen the existing inner ring road. The overall result would be increasing costs for road

maintenance, parking management etc, leading to a rise in local taxation to service the impact of denser traffic. Furthermore, there was no convincing evidence to suggest that an additional ring road would in fact reduce traffic congestion within the city area.

# AN ALTERNATIVE SUSTAINABLE TRANSPORT SYSTEM

There was a wide range of advantages to not building the third ring road. In economic terms, there was no capital expenditure on building the new road. Although the public transport service is provided free of charge, it represents only a tenth of city arts expenditure with central government funding around 80% of the running costs. Furthermore, local taxation did not rise, unlike national trends.

In environmental terms, there was no loss of land to accommodate the new road: pollution was significantly reduced due to the reduction in traffic, more green space became available and 400 trees were planted to create the Green Boulevard, enhancing air quality.

In social terms, Hasselt is a much more pleasant environment for living, working and enjoying leisure pursuits. The public transport systems is comfortable, frequent and free of charge. Around 800 low-cost underground parking spaces were built and street parking costs remained high to deter motorists from parking in public areas.

Overall, the Green Boulevard has led to the regeneration of Hasselt with more people relocating to the city centre; while the local economy has been boosted as more people shop or enjoy leisure time in a pleasant

environment.

<b>Bus use data</b>	<b>1996</b>	<b>2000</b>
Passengers	29,786	316,722
Buses	8	40
Routes	4	9
Journeys (daytime)	84	510
Drivers	18	80

## **Changes in Mode of Travel**

16% of passengers would have previously used a car

12 % switched from cycling to using the bus

9 % switched from going on foot to travelling by bus

## **Consultation**

A period of extensive study and consultation, starting in 1995, preceded the launch of the various elements of the Green Boulevard. The public was invited to participate in developing the Mobility Plan, specifically in relation to cycling and walking.

### **Economic Benefits**

Economic benefits to Hasselt take a number of forms. High parking rates for on-street parking encourage people to use the public transport system and deter car travel within the city; while increased commercial activity within the area generates increased local tax revenue. Furthermore, there were significant savings including the construction costs of road building, as well as the reduction in road management requirements.

The project has resulted in more drivers being employed. The revitalised city centre is drawing a larger number of businesses seeking to locate to Hasselt; no doubt inspired by the increased levels of local spending.

### **Environmental impacts**

The reduction in car use has cut by half the number of traffic accidents. In environmental terms, the absence of standing and parked vehicles also reduces the rainwater becoming oily, and polluting the road surface. The Green Boulevard introduced avenues of trees to the city centre, adding natural 'air-conditioning' that cools the surrounding air, shelters the ground from cold weather, and manages water through roots and foliage.

New vehicles were designed to enhance passenger comfort and improve the quality of experience of public transport. As well as easing congestion and reducing pollution, the new service has led to changes in modes of travel within the city. For shorter trips, the bicycle is most convenient, while for longer distances the bus is the preferred option, and has resulted in a decline in cycling within certain areas.

# POLICY OBJECTIVES

## **Objectives of Hasselt Sustainable Mobility Plan**

- To increase traffic safety
- To implement directional parking policy
- To increase the use of bicycles and public transport as safe alternatives to cars
- To guarantee mobility for everyone
- To minimise the amount of space for non-public transport and replace it with a greenbelt area
- To increase public transport connections within the city
- To improve accessibility for all forms of transport to the city from borough centres
- To improve day-to-day facilities in the boroughs
- To improve facilities for pedestrians in the boroughs
- To manage CO2 emissions by investing in travel-saving initiatives
- To integrate mobility goals into town planning proposals

## **Objectives of Hasselt Sustainable Cycle Policy Plan**

- To encourage the use of bicycles and thus decrease the number of journeys by car
- To promote cycling safety
- To create a coherent network of cycle facilities
- To provide attractive and comfortable cycling facilities
- To focus on prevention of cycle theft

(Hasselt was awarded the 'Cycle-Friendly Enterprise Award', 1999).

#### **Objectives of Hasselt Sustainable Parking Policy Plan**

- To create a car-free city centre
- To encourage the use of public transport from different areas within the region
- To improve accessibility to the city for public transport from the boroughs
- To reduce the amount of parking in residential areas
- To restrict the amount of traffic looking for parking places by providing better signage in relation to car parks
- To create priority parking in residential streets
- To link parking space to capacity of surroundings
- To move long-term car parks to the outskirts of the city
- To implement a town-planning policy aimed at the immediate vicinity of the city
- To implement a parking policy aimed at creating and also guaranteeing availability of parking places for disabled patrons

#### **Objectives of Hasselt Sustainable Pedestrian Plan**

- To implement new facilities (banks, offices, shops, chemists etc)
- To control motorised traffic in the city and the boroughs
- To create spacious zone-30 areas
- To create safe and comfortable pedestrian networks
- To guarantee obstacle-free, negotiable walking areas
- To install safe crossings
- To increase the spatial quality of streets
- To specifically consider those with disabilities when (re)constructing streets and pavements
- To call in official help in instances of improper use of pavements and zebra crossings

In 1998 Hasselt was awarded the 'Banner of the Federation of Pedestrians'.

# THE GREEN BOULEVARD PROJECT

The Boulevard, which ran along the city walls, was built between 1846 and 1850. Traffic ran alternately on the inside and outside of the cobblestone ring road, and the promenade was fringed with chestnut trees. By the end of the 1960s, however, traffic volume had increased to such a degree that the boulevard was converted into a four-lane traffic artery, with a few neglected trees existing at the centre.

To accommodate the increasing streams of traffic and provide an alternative to using the inner ring road, it was decided to construct an outer ring road around the city. However, this initiative was only partly successful as motorists continued to use the inner ring road.

In 1995 city authorities decided to focus on the future of the Green Boulevard and so commissioned a research study. This resulted in a plan to reconstruct the inner ring road. The aims included:

- To improve the quality of the inner ring road and connections to adjoining districts
- To remove the barrier devices in place at that time on the inner ring road
- To improve pedestrian and cycle crossings on the inner ring road
- To reduce through-traffic on the inner ring road

- To improve public transport facilities
- To provide better connections between regional transport, city-centre traffic, and boulevard shuttles so that people might move more freely around the city without the use of cars
- To set up a new traffic layout between the inner ring road and adjoining streets
- To introduce new parking facilities around the inner ring road

Construction work started on the Green Boulevard regeneration project in February 1997 and continued through until May 2000. By then much progress had been made including:

- A nine-metre wide pedestrian area comprising a four-metre wide promenade, planted on either side with

### **Maple trees**

- Speed limits on the inner ring road restricting car speeds a maximum of 30 km per hour
  - On-street parking places are for a maximum of one hour and are expensive
  - Cycle paths run in both directions
  - The pedestrian area has been constructed from cut cobblestones
- Particular attention has been paid to the civic squares that have been created as part of the reconstruction, so that each square retains its distinctive character
- The city market is relocated to the heart of the city centre
  - Leopoldplein Square serves as both a stop-off point for public transport and as a means for the residents of Hasselt to walk around the city as they did traditionally. The design was based on drawings created by the architect Aldo Rossi
  - Street lights, benches and other street furniture were specially commissioned for the Green Boulevard

### **The Bus Network**

The city bus network comprises nine routes with direct journeys to surrounding districts and boroughs. Buses depart every 30 minutes from Monday to Friday, during peak times between 6.30am and 7pm. During the morning and evening rush hours, the frequency of service rises to every 15 minutes for the most heavily used routes.

There is also a special 'Dial-and-Ride' service that services particular areas. The Boulevard shuttle bus runs into the city centre every five minutes, every day except Sundays and holidays. This service leaves from the station with stops all the way along the inner ring road and the Green Boulevard. The City Centre Shuttle, meanwhile, departs from the main station every 10 minutes, every day, except for Sundays and holidays.

# CONCLUSION

Hasselt has delivered a remarkable combination of projects under the umbrella of the Mobility Plan. These include:

- A combined set of parking policies and provision
- An all-encompassing Mobility Plan that focuses on helping people move around more freely
- Free public transport
- Considered cycling and walking policies

In comparison with other cities in Belgium, Hasselt is in an enviable position. Its Mobility Plan has enabled the authority to keep local taxation down; other authorities, meanwhile, have reported rises in the region of 10%.

The Hasselt initiatives make for an interesting comparison with cities like Boston and San Francisco, that have demolished overhead motorways and created multi-storey car parks under public space, as a way of reconnecting communities severed by road construction.

In turn, the current direction of transport and mobility planning in the UK has much to consider in relation to development of roads such as the M40/Westway and the M8. The affordability of projects such as the Hasselt Mobility Plan could prove highly relevant, as quite clearly the economy of Hasselt has improved greatly, and the mobility of its population has been enhanced at less cost

than a carriageway extension plan.



Sust.: The Lighthouse on Sustainability aims to raise awareness of sustainable design in architecture. It was devised by The Lighthouse: Scotland's Centre for Architecture, Design and the City on behalf of the Scottish Executive and in support of the aims of the Policy on Architecture. It is funded by the Sustainable Action Fund.

[www.sust.org](http://www.sust.org)