ARTISTS

Arterial Streets Towards Sustainability

BRUSSELS : UNCHANGED STREET CASE STUDY

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2. LOCAL AUTHORITY

2.1 POLICIES AND RATIONALES

This chapter focuses on key traffic and land use plans, policies and rationales in relation to traffic and land use on arterial streets in general.

New traffic/land use plans and policies in force in the Brussels-Capital Region that is related to the arterial street “Chaussée de Louvain” (owned by Brussels-Capital Region) will be briefly described. First is the list of the different plans and policies:

- IRIS plan (Regional Mobility Plan), Equipment and Transport Administration, Ministry of the Region of Brussels-Capital, 1 October 1998.
- Project of PRD (Regional Development Plan), 20 September 2001.
- PCM (Communal Mobility Plan), Saint-Josse, in progress.
- PCD (Communal Development Plan), Schaerbeek, 2002.
- Plan de stationnement (Parking Plan), Schaerbeek, date unknown.

TOWN CENTRE MANAGEMENT

There is a Town Centre Management in Saint-Josse district (character sections 1 to 3).

Such local offices have been created to give a boost to commercial cores in Brussels, in an integrated project of development. The method is a crosswise management of commercial cores based on partnership (public, private, associations).

The actions to revitalise a commercial area act simultaneously on all city functions: marketing, urban planning, accessibility, conviviality, and economic development.

IRIS – Regional Mobility Plan

The IRIS plan concerns the Region of Brussels-Capital.

The aims of the IRIS plan are:
- to end the spiralling economic and demographic decline and to make urban areas attractive again for residents, business and shops, by diminishing noise, reducing pollution, improving access and lessening stress.
- to reconcile economic development with the quality of urban life, by facilitating access to urban activities (work, shops, services, entertainment, …), reducing the overall nuisances caused by automobile traffic and protecting residential areas as effectively as possible, preserving the quality of public areas.

The measures planned to be implemented are concerning:
- Urban structures, so as to reduce the need for vehicular travel, allow easier access to work places, shops, services, public facilities and schools, as well as improve daytime mobility.
- Public transport, though the development of a comprehensive and attractive system, consolidated into a joint operating entity; a Regional Express Rail network (RER) using
existing railway, Metro and Light Metro tracks and facilities; a higher commercial speed by streetcars and busses; easier access to taxis.

- **Automobile traffic**, by protecting the quality of life in residential areas and easing road congestion.

- **Parking**, through measures in favour of parking for local residents and shops, the creation of park-an-ride facilities in the suburbs and better enforcement of traffic regulations.

- **Pedestrians**, by improving their safety and comfort and providing more clearly visible street signs.

- **Bicycle traffic**, by providing for bicycle routes and promoting the combined use of bicycles and public transport.

- **Goods transport**, with measures concerning deliveries and large vehicles and the promotion of transport by water and rail.

- **Public areas**, by making quality improvements and striking a better balance between areas set aside for pedestrians and those used by vehicles.

**PRAS – Regional Land Use Plan**

The PRAS is a voluntary plan, determining the future face of the urban structure of the Region of Brussels-Capital.

One of the main **objectives** of the PRAS is to limit the expansion of offices on the regional territory, to favour the mix of functions, and to go towards a balanced and sustainable development of the Region.

The PRAS **objectives** are the following:

- to protect the housing;
- to reinforce the vitality of commercial cores;
- to stop the spread of offices in the urban structure;
- to avoid economic delocalisation and the subsequent deconstruction of urban structure;
- to develop urban enterprises;
- to protect the patrimony;
- and to improve the environmental quality.

The **actions** regarding streets and public transport are:

- to improve the speed, regularity, comfort and safety of public transports;
- to contribute to the quality of environment and public spaces;
- to furnish cycle paths and cycle parking;
- to slow down motorists speed;
- to optimise circulation conditions of cars and public transports, taking into account the comfort and the safety of cyclists and pedestrians;
- to diminish the impact of car circulation on the housing and inhabitants activities;
- to improve the inter-modal areas;
- to integrate the networks into the urban environment;
- to create transit parking.
Project of PRD – Regional Development Plan

The PRD, a plan that applies to Brussels-Capital Region, has two objectives:
- to stabilise or increase a mixed population.
- to ensure a growth of activities warranting to inhabitants social progress and respect of life standard in the city.

The city project will have to get over three challenges, that will have to orientate all policies implemented:
- to ensure that the region has a mixed population, by reinforcing social integration of fragile populations, by stabilising the inhabitants in old areas, and by encouraging the comeback to the city, with policies based on sustainable development and improvement of quality of life.
- to favour an economic development that is sustainable and employment creator for Brussels inhabitants, avoiding an over-specialisation of the economy in administrative functions.
- to include the international and intercultural characteristics of Brussels in integrated sustainable development pilot projects, around a strong identity based on openness and dynamism.

The priorities of this city project are:
- to strengthen the residential attractiveness and to favour the social balance, improving the quality of urban environment, by an integrated and ambitious policy, especially in the field of urban renewal, public spaces, public equipments, cleanliness and patrimony.
- to give dynamism to all sectors of the Brussels economy to develop local employment, watching over that activities are compatible with environment and quality of life in the city.
- to guarantee decent and affordable housing to all the inhabitants of Brussels.
- to keep implementing the urban renewal – protection and improvement of housing policies, peering attention to central areas and precarious areas.
- to implement an efficient policy of urban planning, based on a strategy of land use joining the PRD orientations, adapted rules in urban planning, and implement efficient instruments of real estate policy.
- to strengthen the commercial, cultural, and touristic attractiveness of the region.
- to answer the social needs, especially towards the most fragile population, by improving the efficiency of education and training systems, by mobilising social and health action and by developing the public equipment supply.
- to implement a mobility policy concerning movement and parking, joining the improvement of public space, life framework, and protection of housing areas, particularly by a quality public works policy and by a modal transfer from car to other means of travelling.
- to ensure a rational management of resources, to lead an active policy to decrease nuisances, by making it a priority to decrease car traffic and to reinforce the green characteristic of the region.
- to implement a strategy increasing the value of the intercultural, international and European characteristics of Brussels, in the respect of the daily life of its inhabitants.
- to ensure the urban conviviality, by way of the security of people and goods.
- to develop a scientific policy oriented towards new technologies carrying economic growth, taking care that the acquisitions of researches are increased value in the region by technological transfers particularly between the academic world and enterprises.
PCM – Communal Mobility Plan
A project of PCM is currently being studied in the Saint-Josse district (character sections 1 to 3).
Its main **objective** is to prevent through-going traffic.
The main **project** is to lay out the Chaussée de Louvain, by reserving special lanes for buses.

PCD – Communal Development Plan
The two municipalities of Saint-Josse and Schaerbeek have adopted a Communal Development Plan.

**Saint-Josse:**
The main objectives of the PCD of Saint-Josse are the following:
- "to give back the municipality to people" (i.e. more people spaces, more space for pedestrians, more work for people of the municipality, etc).
- to favour cultural activities.
- to create more links between local corporations and unemployed residents.
- to decrease through-going traffic, in order to give back street space to the residents.
The main actions of the PCD of Saint-Josse are the following:
- creation of "district contracts".
- to renovate abandoned landmark buildings (e.g. old train stations).
- to develop a Communal Mobility Plan (see above).
- to strengthen cultural activities.

**Schaerbeek:**
The main objectives of the PCD of Schaerbeek are the following:
- security.
- cleanliness.
- employment.
The main actions of the PCD of Schaerbeek are the following:
- creation of security contracts.
- local employment office.
- increase in the number of street cleaners.
- free phone number for street cleanliness problems.
- creation of an environmental police.

Plan de stationnement – Parking Plan
Schaerbeek district has adopted a parking plan.
3. UNCHANGED STREET

3.1 CASE CONTEXT AND EXISTING SITUATION

3.1.1 Case Study Area and Character Sections

The “Chaussée de Louvain” case study area is 1.25 km in length, beginning at Madou (the small ring road drawing the heart of Brussels) and ending at Meiser (the large ring road drawing the city of Brussels). Madou is a small administrative centre, on a subway line. The carriageway was previously a luxurious commercial street, which is today defined by low quality and high turn-over retails.

Before the construction of the highway, the Chaussée de Louvain was the main road linking Brussels to Leuven, a city located about 30 km from Brussels to the East, in the Flemish Region (cf. Figure 2).

The case study area varies following available datas: Brussels-Capital Region, Saint-Josse and Schaerbeek communes (cf. Figure 4), or the statistical areas concerning the street (cf. Figure 34). The geographical level will be explained for each indicators.

Figure 1: The Case study area and the 5 character sections
The carriageway studied is divided in five character sections, based on the main observable differences, from West to East:

- **character section 1** (Avenue des Arts – Rue Marie-Thérèse): one way and a commercial street with nightclub, metro;
- **character section 2** (After Rue Marie-Thérèse - Rue Willems): two ways, square with shops, cafés and a church;
- **character section 3** (After Rue Willems - Rue du Cardinal): one way and a commercial street;
- **character section 4** (After Rue du Cardinal - Place Dailly): two way street, mainly housing;
- **character section 5** (After Place Dailly - Rond-Point Meiser): two way street, mainly housing, bridge under which is a perpendicular railway line; some new buildings are higher.

**Figure 2**: The Brussels Region and the case study area (chaussée de Louvain / Leuven)

**Figure 3**: The unchanged street "chaussée de Louvain" and the side streets
3.1.2 Location

The case study (Chaussée de Louvain, N2) is located in the East / North-East of Brussels, and is part of 2 communes in its 1.25 km length: Saint-Josse and Schaerbeek (cf. Figure 4). It begins from Avenue des Arts, and ends at Meiser roundabout (cf. Figure 3).

From its beginning, the street is well connected to the public transport network via the subway (Metro Madou, line 2 Clémenceau – Simonis) and buses (STIB: 65, 66, 29, 63, 59 / De Lijn: 107, 108, 110, 351, 358). In the middle, its connection to transport networks is weaker: buses (STIB: 29, 54, 61 / De Lijn: 107, 108, 110, 351, 358). At the end side (Meiser), the connection is improving: tram (23, 90) and buses (STIB: 63 / De Lijn: 107, 108, 110, 351, 358).

Figure 4: The unchanged street, the Centre of Brussels and local municipalities ("communes"), and the arterial road network
Figure 5: Public transport network (subway, buses and trams)
3.1.3 Built Form

**Buildings**

<table>
<thead>
<tr>
<th>CHARACTER SECTION</th>
<th>BUILDING HEIGHT (m)</th>
<th>SPACING OF BUILDINGS (RATIO OF FRONTAGE TO SPACE BETWEEN FRONTAGES)</th>
<th>INACTIVE FRONTAGES (RATIO OF LENGTH OF INACTIVE FRONTAGE TO ACTIVE FRONTAGE)</th>
<th>DOORWAYS ONTO THE PUBLIC REALM (NUMBER PER 100M)</th>
<th>HISTORICALLY IMPORTANT BUILDINGS OR SIGNIFICANT STRUCTURES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Section 1</td>
<td>18 (4 FLOORS)</td>
<td>113</td>
<td>0.24</td>
<td>81</td>
<td>1</td>
</tr>
<tr>
<td>Section 2</td>
<td>27 (6 FLOORS)</td>
<td>51</td>
<td>0.03</td>
<td>36</td>
<td>1</td>
</tr>
<tr>
<td>Section 3</td>
<td>17 (4 FLOORS)</td>
<td>217</td>
<td>0.4</td>
<td>72</td>
<td>0</td>
</tr>
<tr>
<td>Section 4</td>
<td>16 (3.5 FLOORS)</td>
<td>296</td>
<td>0.12</td>
<td>183</td>
<td>0</td>
</tr>
<tr>
<td>Section 5</td>
<td>18 (4 FLOORS)</td>
<td>7</td>
<td>0.21</td>
<td>224</td>
<td>0</td>
</tr>
</tbody>
</table>

The building height varies between 3 and 6 floors; there is a general consistency of building height within each character section. The estimated height of the rooflines varies between 16m and 27m in the different character sections; small variations exist (the urbanism rules were not so strict and the built is not uniform).

The spacing of buildings is small: except from the street openings, there are rarely gaps between buildings (continuous built): waste ground, small alleys, parking, ...

The inactive frontages are not so important compared to active frontages, except in character section 3 (ratio = 0.4). The inactive frontages are due to blind walls of buildings ("no ground floor"), large shopping windows, houses with closed shutters, ... Opposite to that, the transparency between public and private realms is due to inhabited ground floors, open shops and offices, ...

The relative narrowness of most of the buildings, the fact that ground floor retails and upper floor flats have separate entrances, means that there are many private doorways opening onto the public realm. The only exception to that is the two squares (place Saint-Josse and place Dailly), where the public space is wider, takes all its consistency; and where the private realm is more faded.

There are non historically important buildings in this street, apart from a church and a department store. The built environment is quite uniform, no buildings could appear as a significant "landmark". The view is quite open due to the linear character of the street.

The quality of the built fabric is generally poor, nearly no housing renovation occurred in this area. Homes are classical, built in the 19-20th century. The finality of the buildings changed:
previously it was retail on the ground floor and stock/housing on the upper floors, today it is mainly housing on all floors (houses sometimes divided into several flats).

**Figure 6:**
Built form and side space in the character section 1
(Character section 1; 14.02.03; chaussée de Louvain; < W / N-W; side street: rue du Vallon)

**Figure 7:**
Built form and carriageway in the character section 5
(Character section 5; 14.02.03; chaussée de Louvain; < N-E)

**Figure 8:** Landmark building: church
(Character section 2; 14.02.03; chaussée de Louvain; < S; side street: rue Saint-Josse)

**Figure 9:** Landmark building beside a people space: old industrial building
(Character section 4; 14.02.03; chaussée de Louvain; < S-E; side streets: rue de la Brabançonne / avenue Marchal)
### Space Between Buildings

<table>
<thead>
<tr>
<th></th>
<th>Character Section 1</th>
<th>Character Section 2</th>
<th>Character Section 3</th>
<th>Character Section 4</th>
<th>Character Section 5</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Street Width</strong></td>
<td>16</td>
<td>24</td>
<td>14</td>
<td>22</td>
<td>22</td>
</tr>
<tr>
<td>(Average Distance Between Opposing Building Lines in Metres)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Side Space Width</strong></td>
<td>4.2</td>
<td>6.6</td>
<td>4.4</td>
<td>5.5</td>
<td>5.4</td>
</tr>
<tr>
<td>(Average Width in Metres)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Type of Median</strong></td>
<td>Kerbed Islands</td>
<td>Kerbed Ghost</td>
<td>None</td>
<td>Kerbed Ghost</td>
<td>Kerbed Ghost</td>
</tr>
<tr>
<td><strong>Average Width between Side Space (in Metres, Including Median)</strong></td>
<td>7.6</td>
<td>10.9</td>
<td>5.3</td>
<td>11.1</td>
<td>11.3</td>
</tr>
<tr>
<td><strong>Trees and Other Greener</strong></td>
<td>None</td>
<td>Cancel</td>
<td>None</td>
<td>Sporadic</td>
<td>Cancel</td>
</tr>
<tr>
<td><strong>Street Surfaces</strong></td>
<td>Asphalt</td>
<td>Asphalt</td>
<td>Asphalt</td>
<td>Asphalt</td>
<td>Asphalt</td>
</tr>
<tr>
<td><strong>Guard Railing and Bollards</strong></td>
<td>None</td>
<td>Guard Railing and Bollards</td>
<td>Guard Railing and Bollards</td>
<td>Bollards</td>
<td>Bollards</td>
</tr>
<tr>
<td><strong>People Spaces</strong></td>
<td>1</td>
<td>3</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>(Number of Spaces for People to Congregate)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Lighting (Average Metres between Two Lights)</strong></td>
<td>30</td>
<td>24</td>
<td>30</td>
<td>30</td>
<td>23</td>
</tr>
</tbody>
</table>

The variations of street width are due to the one way or two way traffic system. In character sections 1 and 3, the street is at its narrowest (11m), and at its widest in character section 1 (34m). The relative constant street width and building height results in a constant and weak sense of enclosure.

The side space width is between 4.2 and 6.6 meters in average, the minimum is 1.5m and the maximum 14.3 (where buildings are in withdrawal). In some places, the sidewalks are very narrow. The footways widen at each crossings. There is often parking along the street.

The median strips are rare, but we can see from time to time kerbed islands or kerbed ghost. The nature of these median strips doesn’t act as an aid nor a barrier to crossing pedestrians. They were made to enhance car flows (segregation of opposite vehicle flows).

Trees and other greenery are not an important formative element of the street. Character section 4 is the greener, young trees were planted when the square was renovated. Maybe in the future, when the trees start to grow, the green area will be more meaningful. Character sections 2 and 5 have just a few trees, flowers, … The other function of the street does not leave enough space for greenery. In these cases, trees sometimes have the role of indicating the edge between side space and carriageway.
The street surface is made of asphalt. The side space surface is made of different types of cobblestone: 2 normal types varying because of works, and other types where renewals were realised. Street furniture are: garbage cans, some guard railing and bollards (where the side space is quite narrow, the number of pedestrians important, and the traffic quite heavy with high speed, in order to deter pedestrians crossing the street elsewhere than at traffic signals and to deter car parking), bus shelters, street lighting, bench (on the square),... This furniture does not participate in creating a street style, apart from on the renewed square. The places intended for people to congregate are: squares, large pavement, church and its stairs, cafés, ... The lighting in the street is placed on building walls, apart from the squares and other parts of the streets, with lampposts having a warmer lighting.

**Figure 10**: Location of Trees and other greenery; Median islands and/or Bollards; Guard railings; Landmark structures; People spaces
Figure 11: People space; Greenery
(Character section 2; 14.02.03; chaussée de Louvain; < E / S-E; side street: rue de l’Enclume / rue des Deux Eglises)

Figure 12: Trees and other greenery; Urban furniture
(Character section 2; 14.02.03; chaussée de Louvain; < E; side streets: rue de l’Enclume / rue des Deux Eglises)

Figure 13: Street lighting
(Character section 3; 14.02.03; chaussée de Louvain; < N / N-W; side street: rue de Liedekerke)

Figure 14: Guard railings
(Character section 2; 14.02.03; chaussée de Louvain; < E; side street: rue Marie-Thérèse)