BMiX: Working and Living in the Brussels Metropolitan Area: Mixity and X-essibility for livable urbanization / Wonen en werken in de Brusselse metropool : op zoek naar paden voor leefbare verstedelijking (Innoviris 2014 – prfb – 63)

Summary of Results

This research project investigates how urban and peri-urban restructuring of the Brussels metropolitan region (BMR) can contribute to a better balance between working and living, to an increase in the quality of life and a reduction in car dependency. This question was split into two sub-questions:

1. Where and how can functional mixity and densification be realized without compromising the livability of the city in both mixed and not (yet) mixed areas?
2. How can transit-oriented spatial development in the suburbs be organized in a balanced way? What are the barriers to overcome? Which are the appropriate areas, and what spatial configurations are possible?

A primary result of the initial literature study and policy document review of Work Package 1 is the discovery of a systemic error in the use of planning instruments between the Zone for Economic Expansion (ZEUS) and the Enterprise Area for Urban Development (ZEMU/OGSO). Understanding the contradicting dynamics between these planning instruments in the Brussels Canal Zone, and their relation with other Brussels planning instruments (like EFRO/FEDER, neighborhood contracts and zoning plans) is crucial to reach an integrated application of spatial planning measures and spatial economic development instruments in the BCR. Therefore, WP1 investigated in detail the planning instruments present in the Canal Zone. In their current shape, both instruments contradict and risk to counteract each other. This is an important insight for a future economic and spatial development vision for the Brussels Capital Region (BCR) that meets the goals -set out in this project- of integrated and livable development of housing and jobs in the Brussels Metropolitan Area. These early results also contradicted the original hypothesis in the research proposal that this integration between jobs and housing can best be obtained via ‘mixed’ development.

The research focused on gaining a better understanding of which jobs could benefit best the inhabitants of the neighborhoods of Brussels’ poor inner city crescent. The project proposes to operationalize the concept of the Foundational Economy in spatial and economic development instruments, as a means to anchor employment opportunities in the BCR and its poorer neighborhoods. Foundational Economy activities are location-specific activities (ranging from (public) services over localized productive activities such as food, construction, etc.).

Work Package 2 developed new knowledge about reversed commuting, job decentralization and the spatial mismatch hypothesis for low skilled workers. The research finds clear evidence for the hypothesis of job-decentralisation, as well as the fact that decreased job accessibility plays a role in rising unemployment in the Brussels Capital Region. The analysis on the reverse commute originating from the BCR, revealed an important growth of the reverse flows, reaching more than 60.000 outward trajectories every day.

These findings lead to three recommendations for both the employment, housing and transportation policies in the BCR and the wider BMR:

- Invest in strategies to accommodate low-skilled employment within the Brussels Capital Region. Given the inefficient public transit system towards job opportunities in the urban fringe, the ongoing decentralization of low skilled jobs fuels the inner-city unemployment rates. The results and concepts (e.g. Foundational Economy) obtained in WP1 can be integrated with the question how a livable mixing of housing and low skilled jobs can be achieved.
- Pay attention to accommodating the reverse commuting pattern in mobility policies, to increase the accessibility of jobs in the periphery for Brussels’ workers and unemployed.
- Pursue a strategy of Transit Oriented Development (TOD), that also includes what we would call
*Reverse TOD*, meaning that transport hubs within the capital region, should not only be conceived as business centres, but also as primary locations for the development of affordable housing, to increase job accessibility for the population.

In essence, this should be translated in a planning vision that aims to increase home-job accessibility that takes into account future processes of trans-regional-boundary urbanization based on principles of TOD.

Work Package 3 engaged in a research-by-design exercise to develop alternative spatial strategies for the site of the West Station at the request of the Agency for Territorial Development of the BCR (today part of perspective.brussels). This agency acts together with Citydev as the godfather for this project. Perspective.brussels developed a project definition for this site and wanted to further investigate if the proposed program (dominated by high density housing) would result in a workable lay out and livable quarter. As a transport node, the West Station site provides an interesting testing ground for a livable, transit-oriented neighborhood that could support the *Reverse TOD* concept of WP2.

The results of the research-by-design conducted in framework of BMiX by students of the Master in Urban Design and Spatial Planning of VUB focused on the one hand on a reduction of housing density with greater attention for the spatial opportunities in the surrounding area (existing porosity) in order to decompress the heavy program on the West Station site. On the other hand, they focused on the high need of public and green spaces in the extremely dense neighborhoods around the site and on the parallel need of public-common facilities for specific groups (schools and crèches, spaces for youngsters and women). Moreover, they focused on a more systematic investigation on the inclusion of productive activities in the development of the site. This resulted in possible scenarios for other things- food-related activities as well as car-related activities, testing as such the spatial requirements of two types of activities that could support the *Foundational Economy* concept of WP1. In each of these cases, the proposals did not only focus on a typological and volumetric investigation within the West Station site, but also on the wider activity networks related to these activities, linking the West Station site to other locations within the BCR and its fringe (e.g. Pajottenland in the case of food).

To conclude, the BMiX-project puts a number of crucial elements on the table that can contribute to a vision for a better spatial integration of living and working, with the aim of increasing livability:

- Economic development policy in the BCR could define of types of ‘in situ’ economic activities that are best suited to address unemployment. The concept of the *Foundational Economy* provides an analytical lens to make this selection, as illustrated by preliminary tests into the spatial prerequisites of the food and second hand car activities, while future research will focus on the spatial integration of the construction sector.
- It is important to mutually adapt economic development policy and the spatial planning (regulatory) framework to accommodate the coexistence of such activities with housing in the BCR. While the project proposal started out from the hypothesis that a ‘mixed’ development is the best approach for this, the research results so far indicate that this is not necessarily the case. Architectural models for mixed-use buildings can be one solution in this respect, but so far they raise as much questions as they raise answers for the feasibility of a parcel-by-parcel mixity. Design strategies taking into account all levels of scale (from the metropolitan to the regional, neighborhood, area and parcel level) need to be developed.
- The findings on job decentralization and the impact of decreased job accessibility on unemployment, bring to the fore a spatial development perspective that takes into account reverse commuting using the concept of *Reverse Transit Oriented Development*. Transportation hubs around main inner city train stations have predominantly been conceived as primary work (and even office) locations. The findings on *Reverse Transit Oriented Development* as well the research-by-design for the West Station both support an alternative vision for such locations as affordable housing environments, combined with *Foundational Economy* activities.