

EVALUATION OF THE IMPACT OF AN INFRASTRUCTURE ON THE CITY: THE CASE OF HST ON GIRONA.

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ABSTRACT

The construction of the high-speed railroad connecting Madrid, Barcelona and the French border, and included in the Railroad Transportation Plan, is aimed at the creation of a high-speed network with an homogenous, continuous structure of its own, as well as cutting to the half the trip times between the main towns of the country and increasing the role of railroad in the overall demand for transportation.

Also within this high-speed line lies the section Vilobí d'Onyar – Sant Julià de Ramis, which includes the travel through Girona and whose main feature consists of bringing above ground level the whole railroad infrastructure of the town, which at present is viaduct-based. Within this context, the new interaction between the railroad and the city may involve a serious change of the latter in many aspects, thus rising the need for a wide review of all the consequences which may derive thereof.

As a counterweight to the high-speed model, some associations, institutes and groups created a platform named COPALTAV and gave birth to a proposal which meant an alternative to high-speed based on the improvement of the conventional lines in order to turn them into high performance tracks. To do so, the amendment of the geometry of the path was needed, as well as the switch to international width and the use of rolling material employing tilting technology. This solution has proved itself less damaging for the terrain and significantly more cost-effective than HST.

The main purpose of the present dissertation is to point out and describe as widely as possible the consequences that the launch of a large infrastructure such as a high-speed line may have on the city from a socio-economic, urban development and well-being points of view, as well as the above mentioned alternative.

The methodology used consists of a comprehensive study of the physical, socio-economical and territorial environment on which the two options are intended to be applied, i.e. the city of Girona and its surroundings. Furthermore, a review of the two proposed solutions has been also included, so as to identify the actions and the considerable amount of potential effects that they may have on the environment.

Once identified such effects, they are widely analysed in order to assess them and foresee the possible extent of its consequences. Further on, a comparative evaluation of both alternatives is shown and the tools needed to state its adequacy are presented.

The classification of the impacts has been made according to the area around which they are to occur, thus allowing, from a global and subsequently local approach, to obtain an insight of the metropolitan and local focus of Girona. Therefore, as the impacts are described, the scope of the study gets closer to a scale where local institutions gain power of action and where the effects on urban development, social life, economy, environment and quality of life show themselves deeper and closer, though they locate within regions which could be considered of as being wider.

Additionally, a range of actions has been included, focused mainly on the local economic agents, in order to reassess the effects which could arise and bring them to a context which fits the most the population of Girona, stating also the need to draw a schedule which accelerates high-speed in the area of Girona on a medium term basis and which could also bring together and optimize the corrective actions to be taken.

On the conclusions, in order to prevent the reader from drawing a vision of the impact of railroad infrastructures in Girona simply as an addition of positive and negative effects whose result appears still unclear, the main goal is to offer a more global portrait of the impacts through its compilation, its global evaluation and, at the same time, the highlighting of the issues which are deemed to be the most relevant.