

City of Ghent – adapting infrastructure to societal needs

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Abstract

Ghent has a history of building infrastructure for transport and mobility. In the first chapter, an overview of this history and the accompanying societal needs is presented. Next, this continuing story is set to the present day, where focus lies on sustainable means of transport. The last chapter gives an insight into what we believe to be the challenges for infrastructure in the coming years, and how this is already tangible in present-day projects.

Keywords: city infrastructure; climate adaptation; sustainable means of transport; cycling infrastructure; blue-green network; re-opening waterways.

1 Introduction

Being founded at the confluence of the rivers Leie and Scheldt, the city of Ghent has a history of infrastructure around waterways, and bridges in particular. Over the years, this infrastructure constantly had to adapt because of changing societal needs. This article presents an overview of how societal needs in Ghent resulted in adapting infrastructure during history, present day and future. A city evolves and changes, and so does its infrastructure.

2 History to present day

During history, new infrastructure in Ghent mainly resulted from a changing need in transport modes, either for passengers or for goods. The focus shifted several times, resulting in the need for adapted infrastructure. Yet overall, the keyword for infrastructure was mobility of passengers and goods.

2.1 Before World War II

Settling in the close proximity of a waterway had several advantages such as the presence of fresh water and the possibility of transport. Ghent too started as a settlement near waterways, and quickly developed. During the Middle Ages Ghent was the third biggest city of Northwestern Europe. Because of this development, the needs of the city changed, and the waterways were adapted according to these needs. Some waterways were filled up, others were deepened and broadened, allowing bigger ships to use the waterway, and new ones were created in order to resolve black points in the transport network.

A visible remnant of this evolution can be seen at the very city centre, around the Graslei and Korenlei. This is the historic harbour of Ghent, and until the construction of a ring canal in the second half of the 20th century, ships of several dimensions had to pass here while travelling their itinerary over the river Leie. The location in the heart of Ghent necessitated the presence of connections between both banks of the river, so several bridges were built over the Leie. The 'Grasbrug' can be found at