

## Urban Design for Improving Public Health in Groningen (UDIHIG)

Urban interventions not only determine the shape of cities, but also the way they are used: they impact lifestyles. A considerable body of knowledge exists on the differences in health conditions between neighborhoods from different periods. Likewise, there are studies that link lifestyles to health conditions and urban qualities to lifestyles. What is understudied, however, is the actual effect of urban interventions on lifestyles, and hence – indirectly – on health: post intervention evaluations are scarce. Also, the knowledge embedded in the design disciplines is hardly ever taken into account.

In order to assess whether intended urban interventions contribute to healthier lifestyles, the post-war neighborhood Paddepoel in Groningen was singled out as case study. It has a clear border, a characteristic urban layout and the health status of its inhabitants is relatively low. Based on a spatial analysis, questionnaires in which the inhabitants commented on the problems they perceived, and the healthy cities knowledge base, a design brief was formulated. This resulted in a series of urban planning proposals. A pilot project assessed ways to improve the accessibility of a shopping for elderly, the aim being to make walking and cycling more attractive. The major challenge was how to present the planning proposals to the inhabitants. To solve this problem, the planning proposals were translated in Virtual Reality (VR), allowing inhabitants to experience them in 3D. After that, they filled in questionnaires that provided information on the impact of the new plans on their lifestyles.

The pilot project shows that the selection of Paddepoel was appropriate, and the identification of lifestyle aspects that have proven to be largely determined by the urban layout made sense. Moreover, the assessment method that combines questionnaires with VR technology appears to be very effective.