

# CYCLING INFRASTRUCTURE

## THE TESTING

The province of Utrecht is a top region as far as cycling as a way of transportation is concerned with the country's most-used cycling track and the biggest bicycle shed under construction. Cycling is healthy and releases little carbon dioxide. An attractive, green and easily accessible urban environment is a high priority for both the municipal and provincial authorities. This has resulted in a lot of investments being made in cycling infrastructure. For instance, long-distance cycle tracks allowing one to easily commute between home and work, have been constructed. Various living labs are experimenting with new solutions for cycling such as share-platforms and charging stations for electric bicycles or the use of GPS tracking systems. The 'Light Companion' is a clever invention which allows cyclists to quickly pass through traffic lights. Tests have been carried out to determine how remote signal lights can be used to inform cyclists whether to cycle faster or more slowly, with a view to getting a green light. Furthermore, special attention is required for busy bicycle parking parks. In 2015, we began testing 'spots available/full' signs at four cycle parks in Utrecht with a dual-camera system allowing for depth perception. Using these cameras, the system tracks which spots are occupied or available. Signs in the city allow cyclists to see how many spots are available in each cycle park. The world's largest high tech cycle park,



● 'Living lab' for Europe's major societal challenges



# CYCLING INFRASTRUCTURE

currently under construction, which boasts 12,500 parking spots, is also being equipped with 'spots available/full' signs.

## COOPERATION

The provincial authorities have drawn up a network of regional cycling paths. They co-fund any improvements made by the municipal authorities. The provincial authorities are responsible for the 'quick cycle tracks', i.e. the highest-quality long-distance fast cycle tracks. The Utrecht municipal authorities sponsor and manage the 'spots available/full' signalling system. The provincial authorities and national government both provide funding. The Dutch Cyclists' Federation (*Fietzersbond*) contributed to the placement of the signalling posts by identifying suitable spots for such posts. Many innovative companies are involved in development of new technologies and logistic solutions.

## SCALING UP

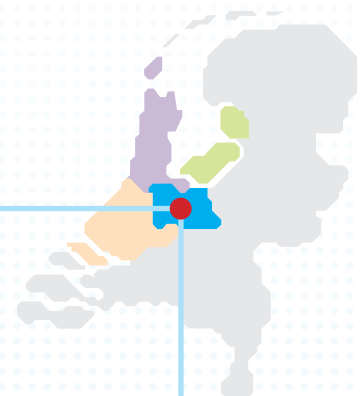
Other countries and regions where cycling is becoming increasingly popular will face similar logistic problems with overcrowded cycling routes and cycle parks in the future. Our innovative cycling solutions can be therefore of great interest for other countries and regions which are dealing with large numbers of cyclists and similar issues.

## EUROPEAN SIGNIFICANCE

Europe has several cities with a great or sharply increasing number of cyclists, such as Copenhagen, Berlin or London. Our innovative solutions are relevant to all of these cities.

## REQUEST

Other regions and countries are highly interested in Dutch cycling infrastructure and the experiments we conduct to make the cycling experience even more efficient. However, we could do with more knowledge on how to tell our story in a more professional manner. In this respect, we could learn a thing or two from other countries and regions.



Businesses  
Knowledge institutions  
User-driven innovation  
Target users