

# Making cycling more comfortable and fun

An increasing number of commuters are swapping their cars for a healthier, more environmentally friendly and affordable solution: the bicycle. With the interests of the environment in mind, municipalities would prefer to see more bicycles and fewer cars on the road as well. However, the current Dutch infrastructure system lacks the space necessary to accommodate the rapid developments as a result of increasing bicycle use. The Dynniq CrossCycle makes cycling more comfortable and fun, without the need for expensive infrastructural changes. With red lights disappearing, cyclists are free to continue on their way.

## Safe and easy

Users simply download the app on their smartphones and it's ready to use, without the user having to operate or look at the app. When a cyclist using the CrossCycle App approaches an intersection, green light time can be extended or the traffic lights will change to green earlier. This way, there's no need for the cyclist to stop. If the system detects a group of cyclists who are using the traffic light application (school children, for example), the group will be given priority over all other traffic without them having to take their phones out of their coats or bags.



### **Advantages**

- Cycling becomes an attractive alternative
- A modal shift from the car to the bicycle is stimulated
- Safe: no interaction required with cyclists
- No extra infrastructure necessary

### An integrated solution

The solution is based on an app in combination with cloud services that connects to the local traffic light controllers. However the app functionality can also be embedded in third parties apps. For this purpose Dynniq provides the SDK - Software Development Kit. The SDK consists of software that facilitates the connection with the Dynniq Cloud. The SDK enables a wide scale deployment of CrossCycle. The eco system that comes with the CrossCycle app (or SDK) is independent from the brand or system of the traffic controller.

## How does CrossCycle work?

CrossCycle uses GPS localisation plus an intelligent approach algorithm. While the app is virtually inactive when not in the vicinity of a traffic light, the frequency of app activity increases when a cyclist approaches a traffic

light with CrossCycle functionality. The app includes a filter mechanism for speed, which means that the app will not work if an app user approaches traffic lights in a car. Use of the app is completely anonymous as well. No identity information is linked to the data and the app acts solely as a smart detection device. The data that the app generates can be used to create insight in the flows of bicycle traffic and can be used to develop the cycle policies of the city.

#### Green light in the municipality of Tilburg

In the municipality of Tilburg, the CrossCycle app is being used to great satisfaction of both users and the municipality itself. As part of the cities bicycle highway, this solution has been installed at the intersections of the Burgemeester Brokxlaan with the Gasthuisring and the Jan Heijnstraat. If you would like more information about the pilot or the CrossCycle app, please contact Dynniq via one of the contact options indicated below. Or try it yourself in Tilburg city!





Dynniq designs, develops and maintains innovative solutions that enhance everyday life for people all over the world. We aim to be a reliable partner who listens and engages pro-actively. If you would like to find out more or receive more detailed information, we would be happy to assist you.

For specific information about CrossCycle, please contact Martin de Vries: martin.devries@dynniq.com

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