

# NEEDS & OPPORTUNITIES RING ROAD EINDHOVEN

RESEARCH RESULTS  
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BASED ON THE 8 FEBRUARY 2018- REPORT



# 5 LIVING LABS IN 5 YEARS



# FASE 1

VERVANGEN ARMATUREN  
NAAR **LED**



# FASE 2

IN KAART BRENGEN  
**BEHOEFTE**N EN KANSEN



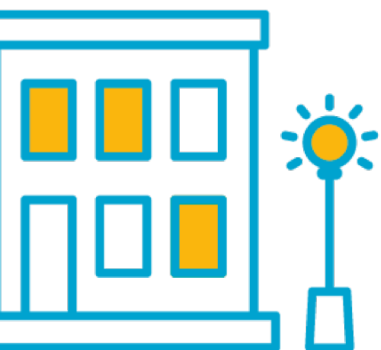
# FASE 4

REALISATIE EN TOETSING



# FASE 3

RICHTINGEN EN  
**OPLOSSINGE**N



## NEEDS AND OPPORTUNITIES

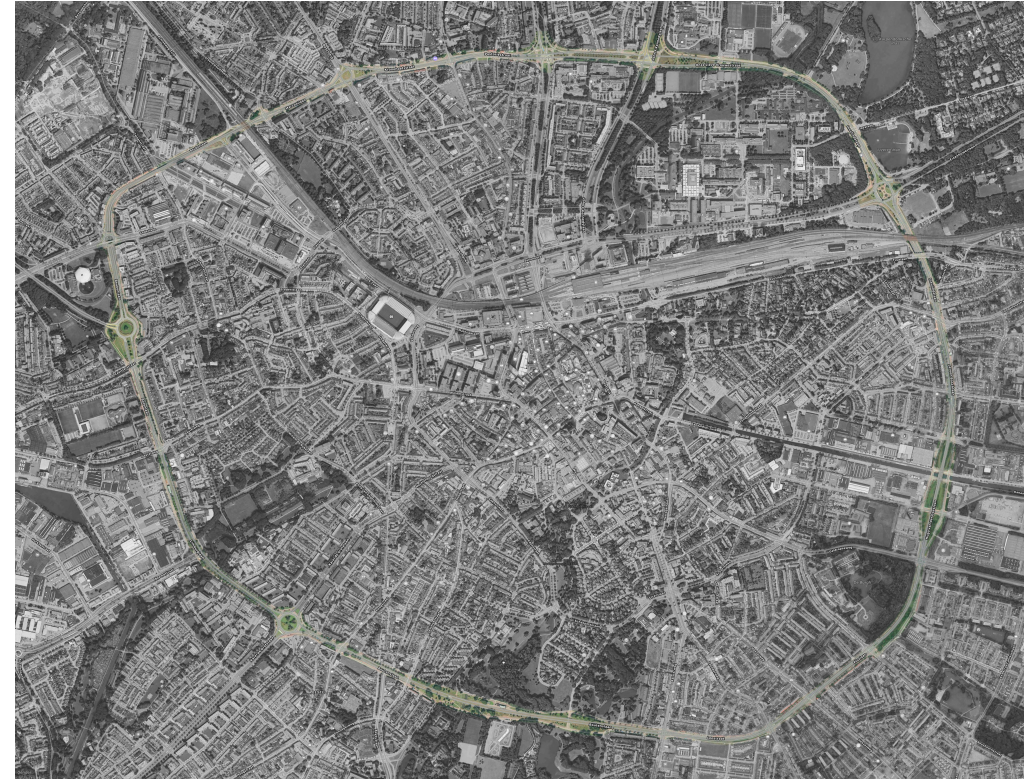
Research approach: a multitude and diversity of research activities and methods to reach the different target groups



## RING ROAD

The Ring is seen to be the most important route in Eindhoven. The road encircles the city centre and links the various districts [formerly villages]: Woensel, Tongelre, Stratum, Gestel and Strijp. In this way, the Ring reminds us of how Eindhoven came into being and it has effectively been a 'lifeline' for the city for almost fifty years.

The entire route consists of a dual carriageway flanked on both sides by access roads. The Eindhoven radial roads traverse the Ring from various directions to the city centre.



Number of light points : 959

Number of masts: 754 [12% = 40 years or older]

Number of armatures: 1.138 [18% = years or older]

## STAKEHOLDERS RING ROAD

### Road users (local & regional)

Car drivers

Pedestrians

Cyclists

Professional drivers: bus, taxi, lorry,  
emergency services.

### Adjacent

Living areas, petrol stations, schools,  
shops, health care, sports parks, public  
transport companies, companies,  
emergency services, catering facilities.

### FOCUS

4 km trace between the canal and JF  
Kennedylaan



## CENTRAL RESEARCH QUESTIONS

What **needs** do people have concerning the Ring road?

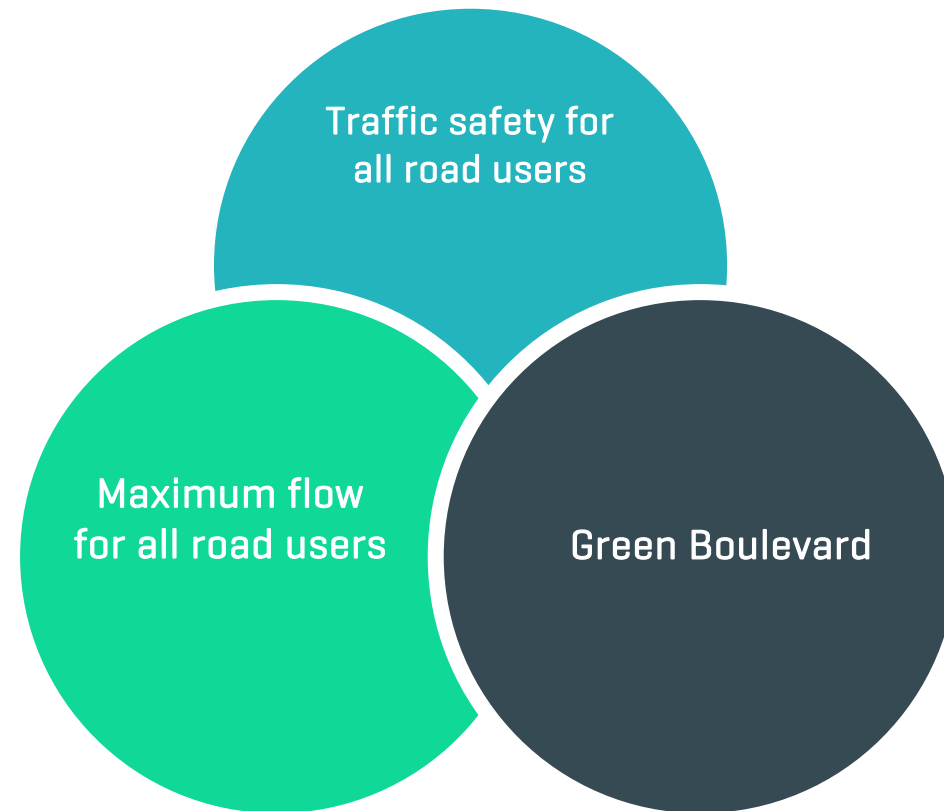
- What are pleasant and unpleasant places?
- What do you do there?
- What makes a place pleasant?

What **opportunities** do people recognise for a Smart Lighting Grid on the Ring road?

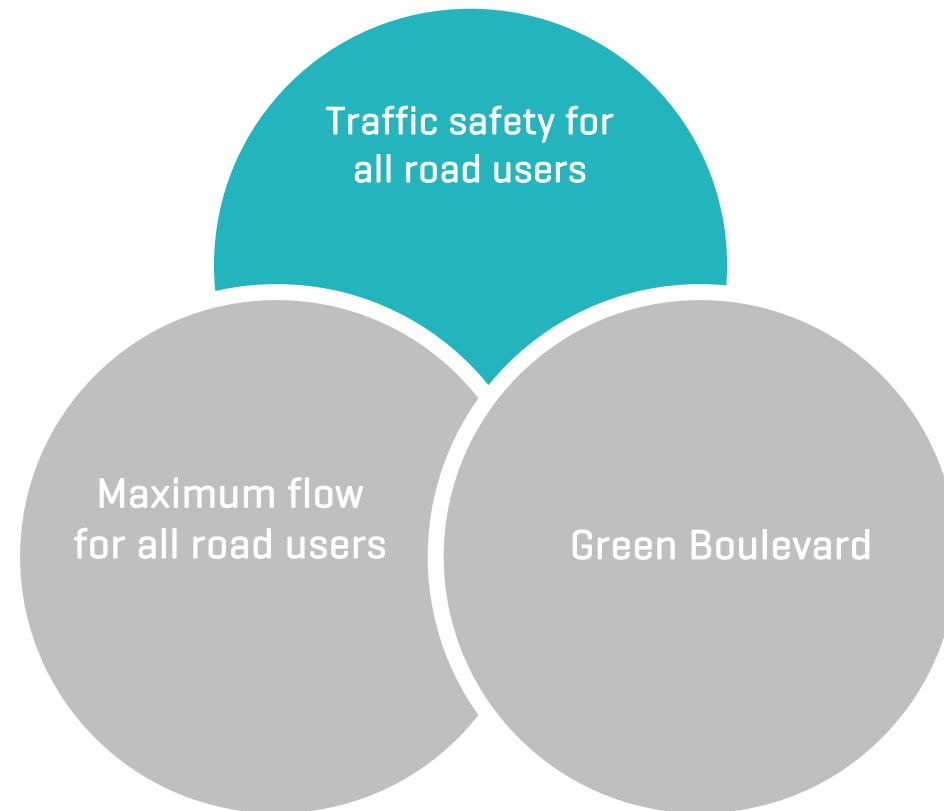
# RESEARCH APPROACH TRACÉ RING



## NEEDS FOR THE RING ROAD



## NEEDS FOR THE RING ROAD



# 1 TRAFFIC SAFETY FOR ALL ROAD USERS

## Need 1A Cyclists want a safe cycle boulevard

Cyclists want a safe route. The Ring road offers a good flow, especially for cars, to get from A to B quickly. In a number of places there is a special bike path, but more often cyclists have to share the service road with cars.

*I prefer not to cycle on the ring road, I prefer to cycle through the centre. There it is quieter, safer and I do not cycle in the emissions*  
[student Fontys, inhabitant of Strijp]

*On the Limburglaan cycling and car traffic is mixed, I prefer not to come in the evening.*  
[inhabitant]

Many local residents and students indicate that they prefer not to use the Ring as a cyclist. There are many unsafe situations, such as crossings, unclear situations and the parallel access roads where cars and bicycles have to share space. Sometimes the access road is even a two-way traffic road, like next to the Insulindelaan near Fontys, and cars drive fast. In the dark, the cyclists avoid the shared roads - such as the parallel road on the Limburglaan - because they feel invisible. There are also situations where the cars that are turning off cross the bicycle path diagonally, such as the Kronenburgstraat, and drivers have difficulty to see the cyclists.



# 1 TRAFFIC SAFETY FOR ALL ROAD USERS

*The junction at the Kennedylaan is large, with a lot of traffic from different directions: you have to process a lot of information simultaneously.  
[driver calamity service]*

*On the Kronehoefstraat the traffic flow is not good, it always jams. People who do not know it here also change lanes, because the situation before turning left is unclear.  
[car driver and inhabitant of Eindhoven]*

## Need 1B Road users want clear traffic situations

Road users want safe traffic situations. The Ring road has many and mostly single-level crossings, some of which are very confusing. In particular, the [professional] drivers and emergency services indicate this causes unsafe situations in many places.

At some crossings, such as the Kennedylaan or Tongelreseweg, the traffic situation is often understood wrongly or too late. In a number of places the rules are unclear, such as the traffic light at the Hugo van de Goeslaan. In the Strijps Bultje the situation is unclear due to the acceleration lane from a low perspective. The roundabouts are experienced as very clear and safe.



# 1 TRAFFIC SAFETY FOR ALL ROAD USERS

## Need 1C Crossing traffic users want a smooth passage

People want a smooth passage and safe crossings for pedestrians and cyclists, so that children and the elderly dare to cross. The Ring is primarily a thoroughfare and logistical route, in which a smooth passage for all road users - pedestrians, cyclists or motorists - is sometimes lacking. There is also a need for sufficient places to cross, because it is now happening in places where it is not allowed, for example at Kronehoefstraat and Beukenlaan, and motorists experience unsafe situations.

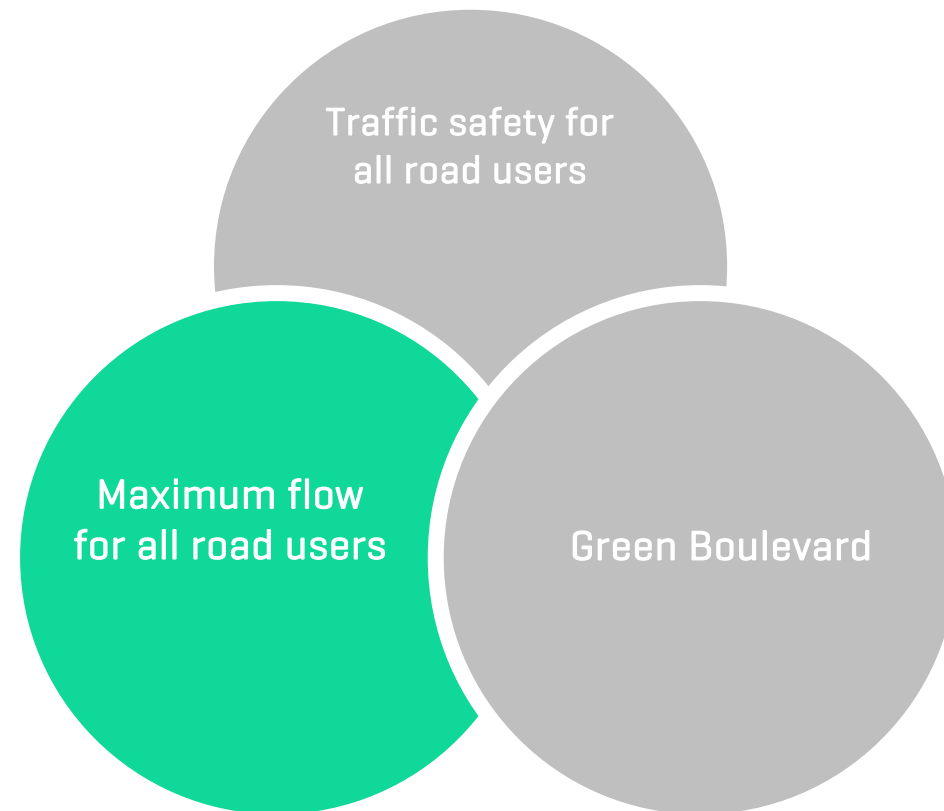


*At the Pastoriestraat people often cross, for example from the hotel when they go to the market. That is not allowed, but they do it anyway. Here you always have to be careful.  
[Cab driver]*

*I rather choose to go shopping on my side of the ring road than to cross it. For me, the Ring is an obstacle.  
[inhabitant alongside the ring road]*

The Ring is sometimes an obstacle to cross, which makes it a barrier in the neighbourhoods. Residents also indicate that a maximum speed of 50 km / hour would promote road safety, whereby crossing roads could be 30 km.

## NEEDS FOR THE RING ROAD



## 2 MAXIMUM FLOW FOR ALL ROAD USERS

### Need 2A Road users want a maximum flow and green wave

The Ring is an important traffic artery. Outside the rush hour, the green wave generally works well. Especially on the south and east, car drivers, taxi drivers and bus drivers are satisfied with the flow with the green wave.

In rush hour there is a lot of congestion, for example at the industrial sites at the Geldropseweg and the Jeroen Boschlaan at 4 o'clock in the afternoon.

Bus drivers are satisfied with bus traffic lights, such as at the Leenderweg, and the bus lanes, because for them - if they have to drive on a timetable - there is no stress.

Taxi drivers indicate that the bus lanes occupy a lot of space and cause congestion, which is not only annoying for other traffic, but also causes poor air quality.



*By far the most important is that the traffic flow on the ring road runs smoothly, even if it is busy on the road.  
[car driver Switch Cool Wall]*

*My working hours are out of the rush hours and everything goes fine. I have no problems on the Ring. [an employee working on different places in Eindhoven]*

*At the Insulindelaan, between the railway and the Fuutlaan, you sometimes stand still for 4 minutes, but there is no time for that in the timetable. This creates a lot of stress for passengers who are afraid of missing their connections and also for [young] drivers.  
[bus driver]*

*Bus lanes, such as on Montgomerylaan, take up a lot of space and are only used a few times per hour. They impede the flow and thus deteriorate the environment.  
[taxi driver]*

## 2 MAXIMUM FLOW FOR ALL ROAD USERS

### Need 2B Road users want comprehensible and consistent design

People want an intuitively understandable design of the Ring. As an important supply and disposal of people and goods in the inner city, the use of the Ring should be clear. However, the traffic design is not transparent or intuitively understandable.

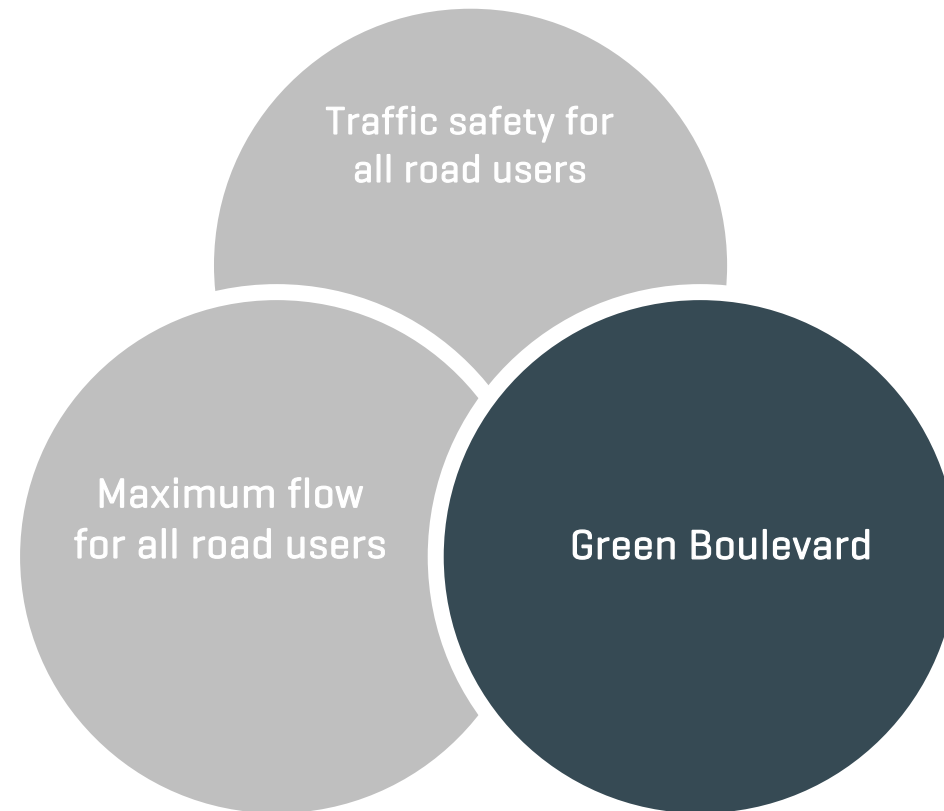
People indicate that they do not understand some situations. Like the Beukenlaan / Tilburgseweg roundabout and the Zeelsterstraat, the maximum speed is 50 km / h, while it is 70 on the ring. In a number of situations it is unclear whether left-turning traffic should pass around each other or for each other. This results in unclear and therefore unsafe situations.

*Here is a very small part where you can go 50, just before and after you are allowed 70. There is also a speed camera. Just do the entire ring 50, which is also less polluting [car driver]*

*If you drive on the Aalsterweg it is very unclear whether you have to drive around each other when turning left or not. [car driver]*



## NEEDS FOR THE RING ROAD



## 3 GREEN BOULEVARD

*It's nice to live here. All facilities are nearby. Easily accessible, good parking, pleasantly busy. Fine.  
[Inhabitant on the market place Haagdijk]*

*The Beukenlaan up to the roundabout with the Cederlaan is a beautiful motorway that creates an urban feeling.  
[Switch Cool Wall]*

*For example, it can become a big green ribbon, besides that it can quickly carry people away from the city. Everything is now focused on the traffic function of the Ring, but for me it is a living environment. I want more attention for that. Everywhere on the Ring houses are directly adjacent [Inhabitant alongside the Ring road]*

### Need 3A Inhabitants of Eindhoven want a green living environment

People like to have a nice and green living environment. The city centre can become a traffic-low city if the traffic flow on the Ring road is good, so that there is no shortcut traffic through the city. The Ring road is seen as a beautiful motorway that contributes to the 'big city feeling', but also as a road that can become greener without sacrificing traffic flow.

More green can make the Ring more attractive for cycling or walking. Green is seen as pleasant, both to experience when one is mobile on the bike or from the car, and to live in.



## 3 GREEN BOULEVARD

### Need 3B Inhabitants of Eindhoven want to stimulate healthy behaviour

People want a clean environment and want more awareness on the impact of behaviour on the environment. Air pollution is seen as a growing problem: traffic congestion on the Ring road is of course also responsible for this. There is a lot of stationary traffic due to the reduction of lanes or lack of tuning of traffic lights in the green wave. Cyclists indicate to avoid the ring because it is dirty.

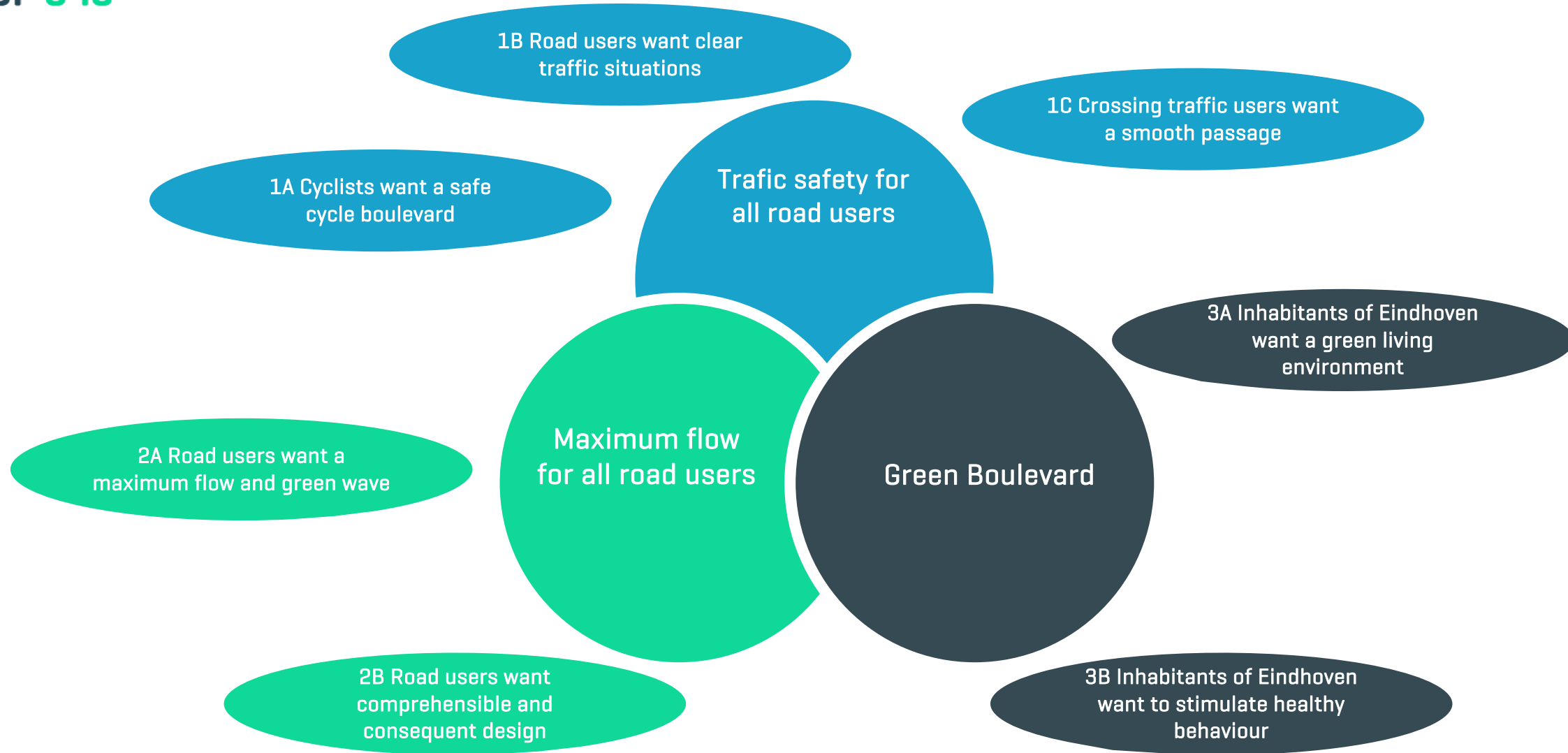
Because almost everyone uses the Ring, it is also seen as the ideal place to work on people's awareness. For example, by making drives aware of the consequences of their choices and moving to healthier driving behaviour. But perhaps also broader: making Eindhoven a sustainable city by showing residents and users of the Ring what actually happens when driving.

*Clean Air. Reducing air pollution, the concentration is very high. We are particularly thinking of residents, especially focused on the future: the youth of today.*  
[Inhabitant]

*Encourage safer and healthier driving behaviour through awareness.*  
[Inhabitant]



## NEEDS FOR THE RING ROAD



## NEXT STEP ...

What  
**IDEAS** or **SOLUTIONS**  
can we  
**FIND** or **CREATE**  
to meet  
the **NEEDS** of the stakeholders?

[WWW.JOUWLICHTOP040.NL](http://WWW.JOUWLICHTOP040.NL)



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