



**Veberöd, a research Village for a sustainable society**



# Veberöd

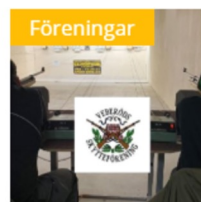
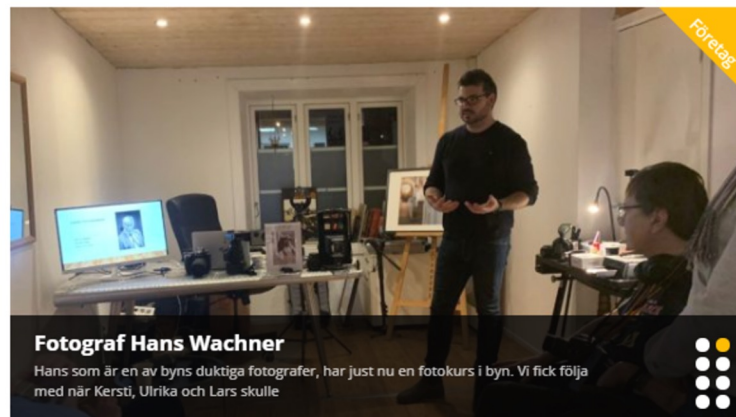
5000 citizens

1200 new households to 2040.

How to do this sustainable?

# Veberod.nu – The Local Platform

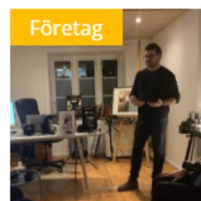




### Skyttet ökar i byn

Published on februari 5th, 2020 | by *admin*

Bakom idrottshallen på Svaleboskolan hittar ni ingången till byns populära skytteförening. Den har funnits i byn i nästan alla tider och ökar nu på med fler som vill lära sig skjuta luftgevär. Ökningen av medlemmar har ... [Read More →](#)



### Fotograf Hans Wachner

Published on januari 31st, 2020 | by *admin*

Hans som är en av byns duktiga fotografer, har just nu en fotokurs i byn. Vi fick följa med när Kersti, Ulrika och Lars skulle lära sig hur man tar bra porträttbilder. Hans som huserar på ... [Read More →](#)

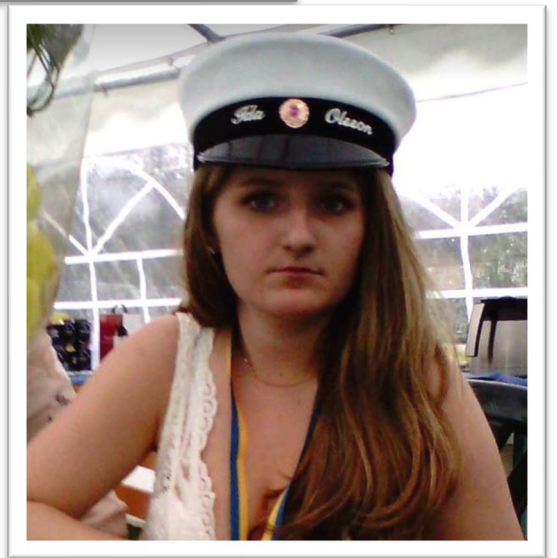
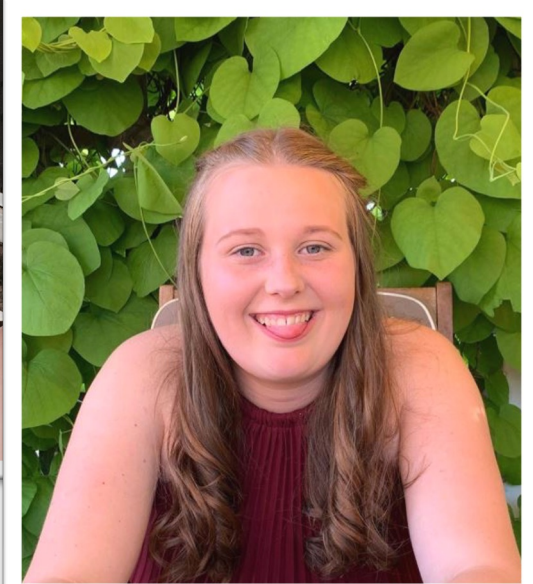
### FEBRUARI

7 FEB	BLOMBINGO
11 FEB	STIMULANS I VARDAGEN I SAMARBETE MED HEMVÅRDEN
14 FEB	EWA GUN WESTFORD FÖRELÄSER OM SITT YRKE SOM KVINNLIG POLIS
14 FEB	DROP-IN-VIGSEL

VISA FLER EVENT









## User cases







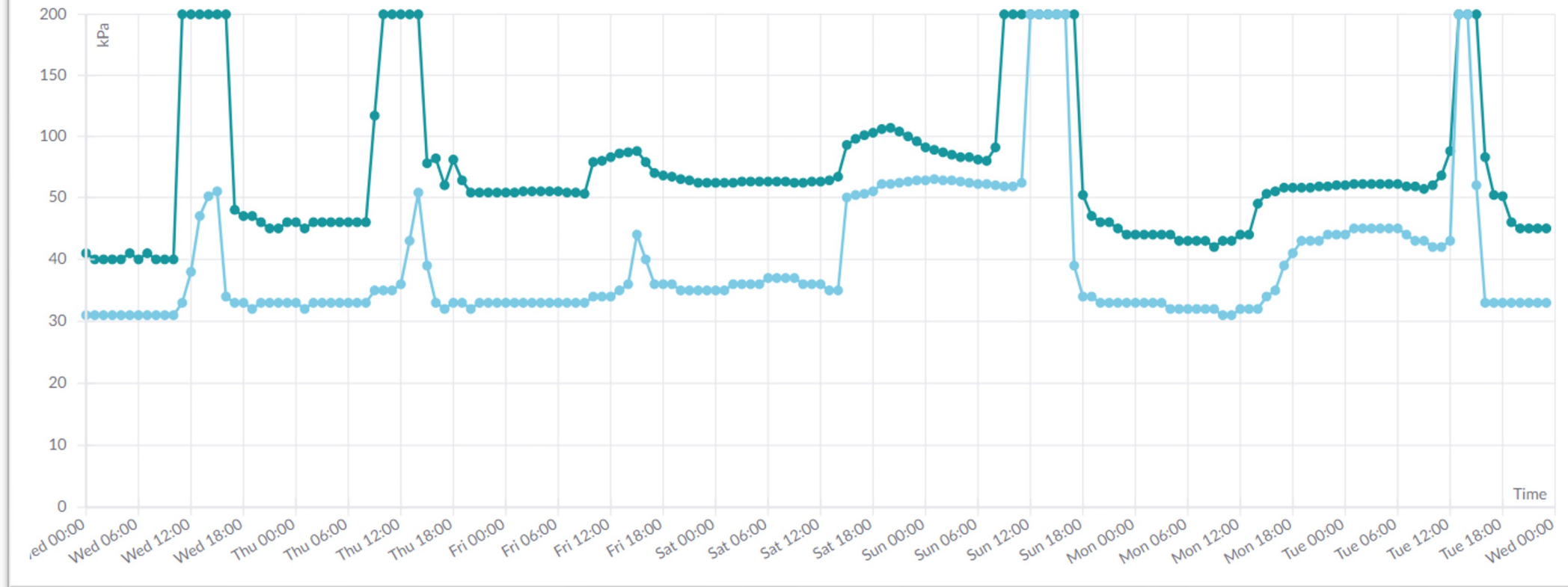
Mid summer 19.22





# Moisture

## 25 alarms in 9 weeks





  
**björkhaga**  
VÄXTER FÖR DIG SOM  
BYGGER LANDSKAP





Fukt 4C Annelund

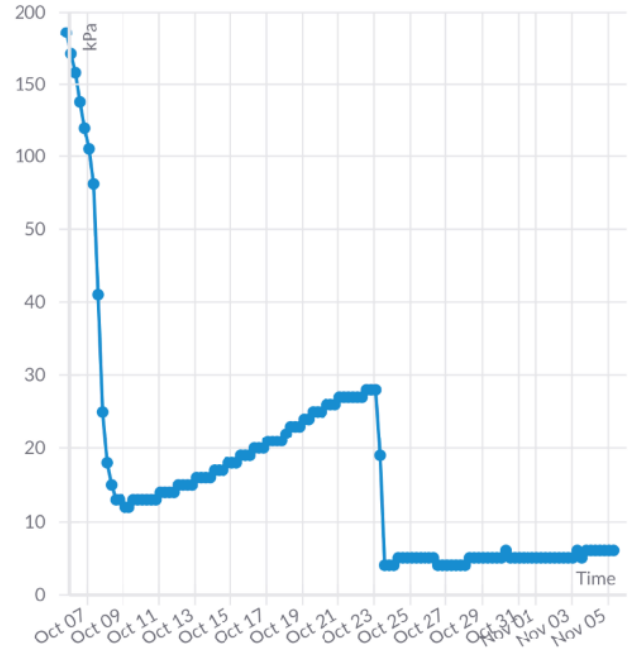
← Prev Next →

Last month

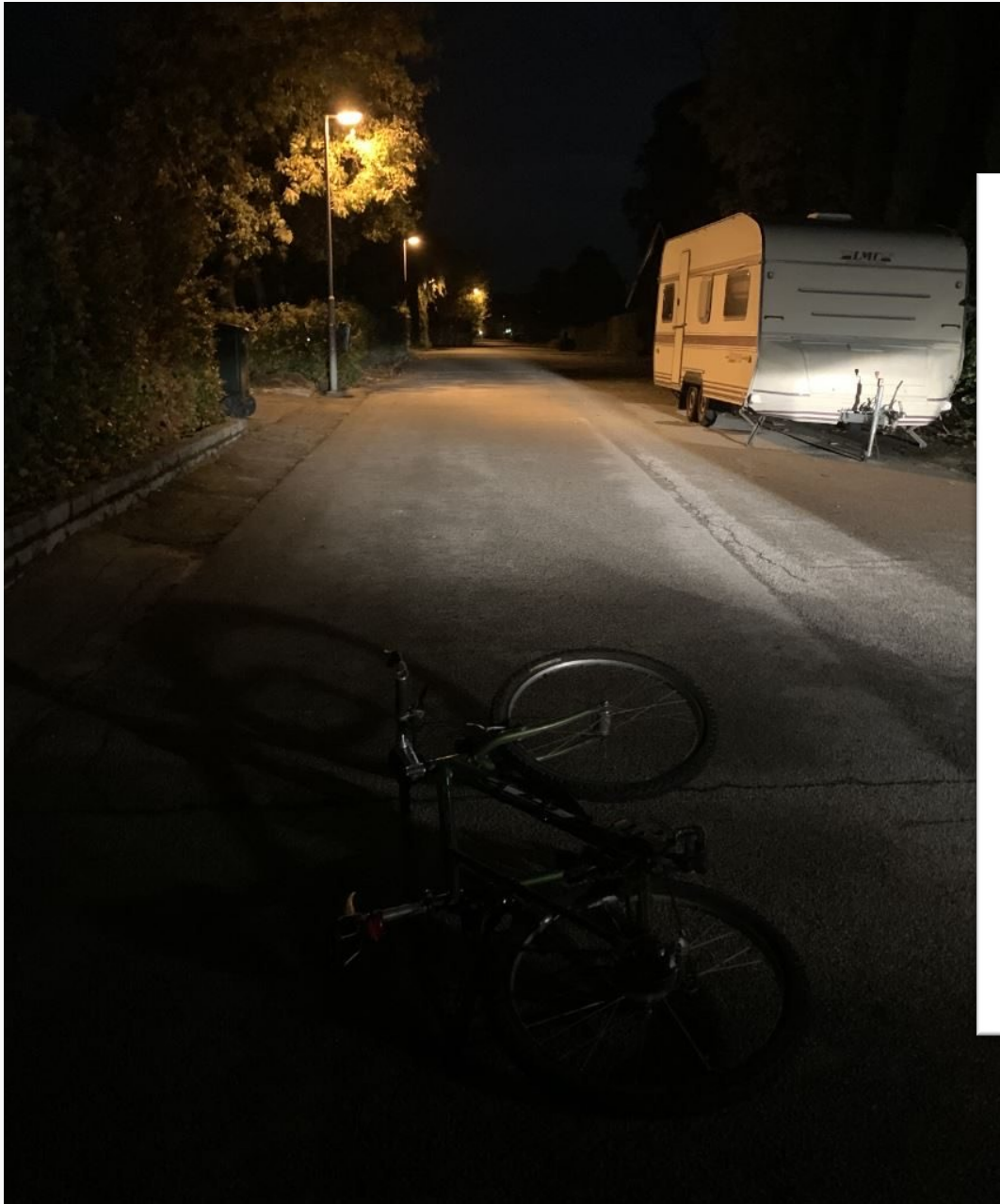
Month

18/10/05 22:00 - 18/11/05 23:00

### Moisture







## Location



2 minutes ago

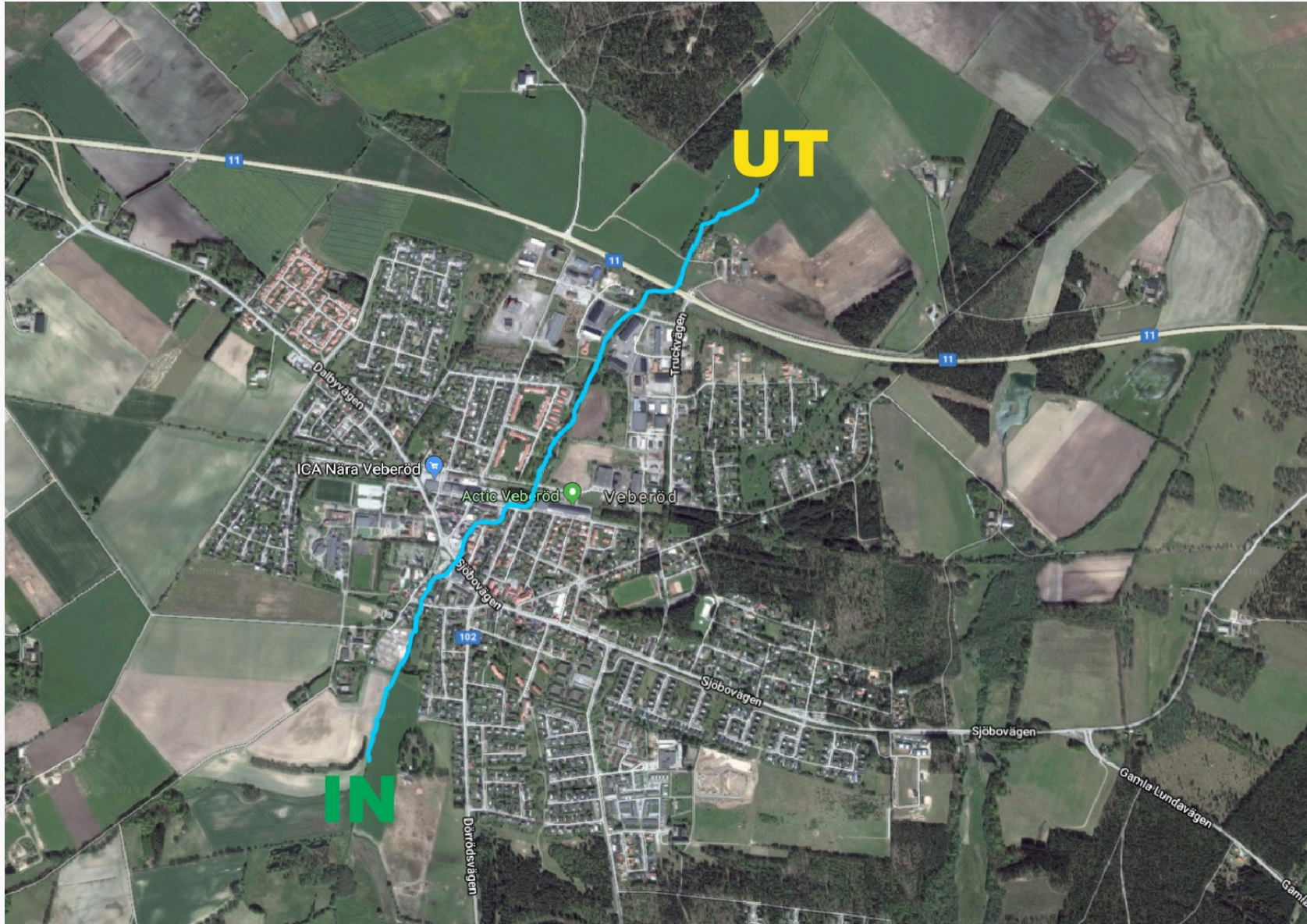
## Address

Dörrödsvägen 5, SE-247 61 Veberö...

# Local democracy







# "A nice minus Village"



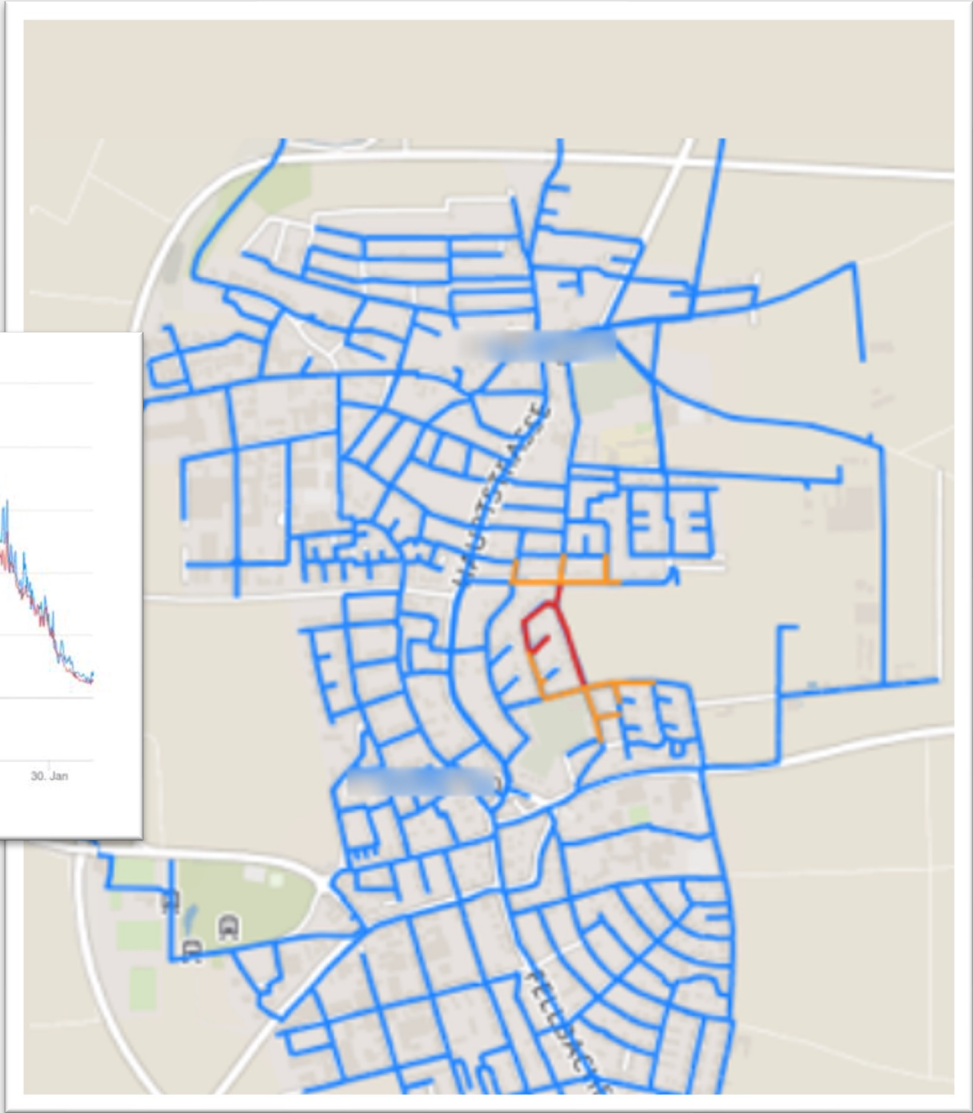
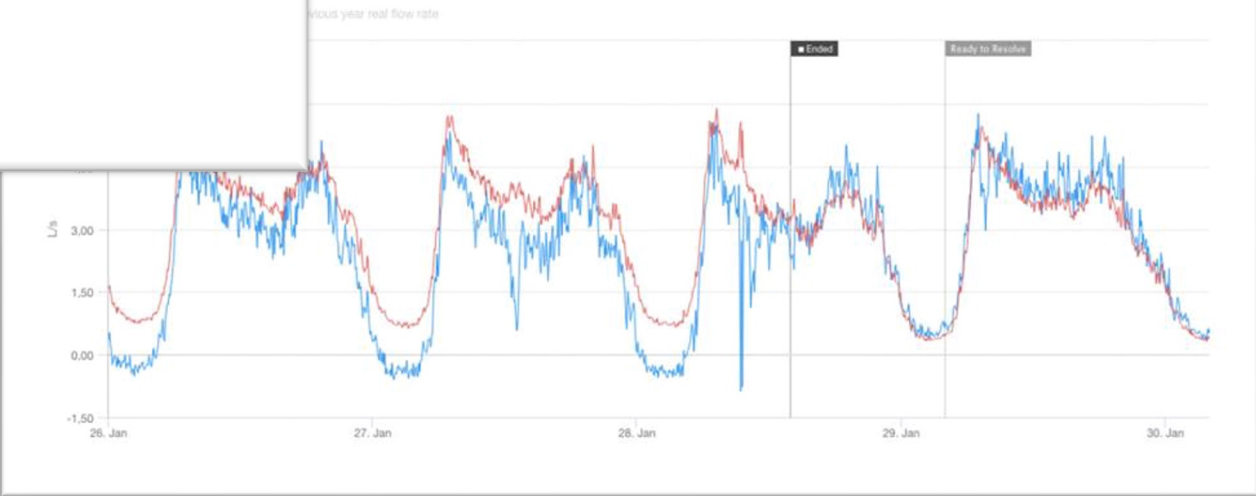




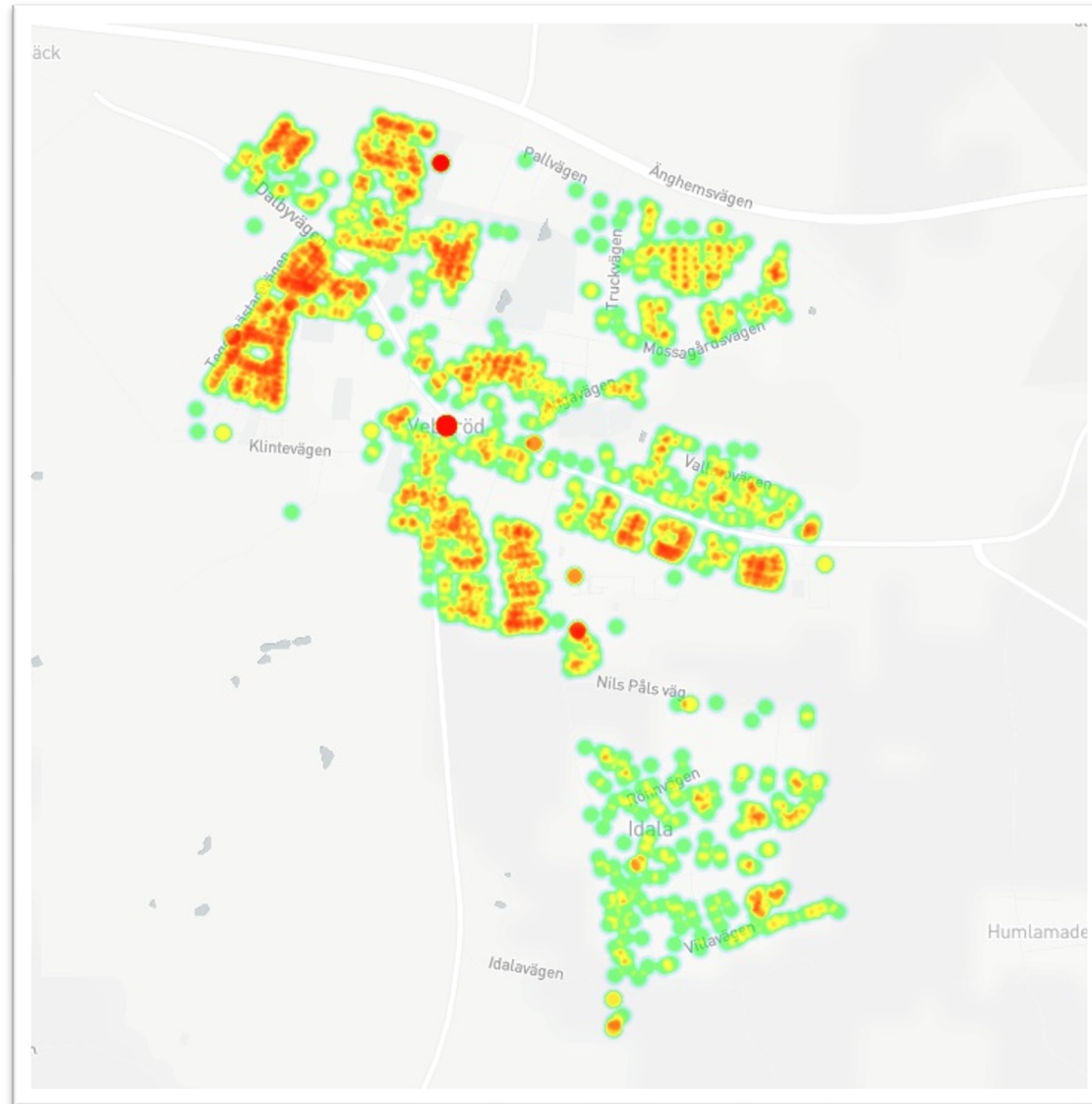
 IO-dit



# The goal is to make Veberöd Sweden's most sustainable Village for drinking water



# Water



# Virtual doctors



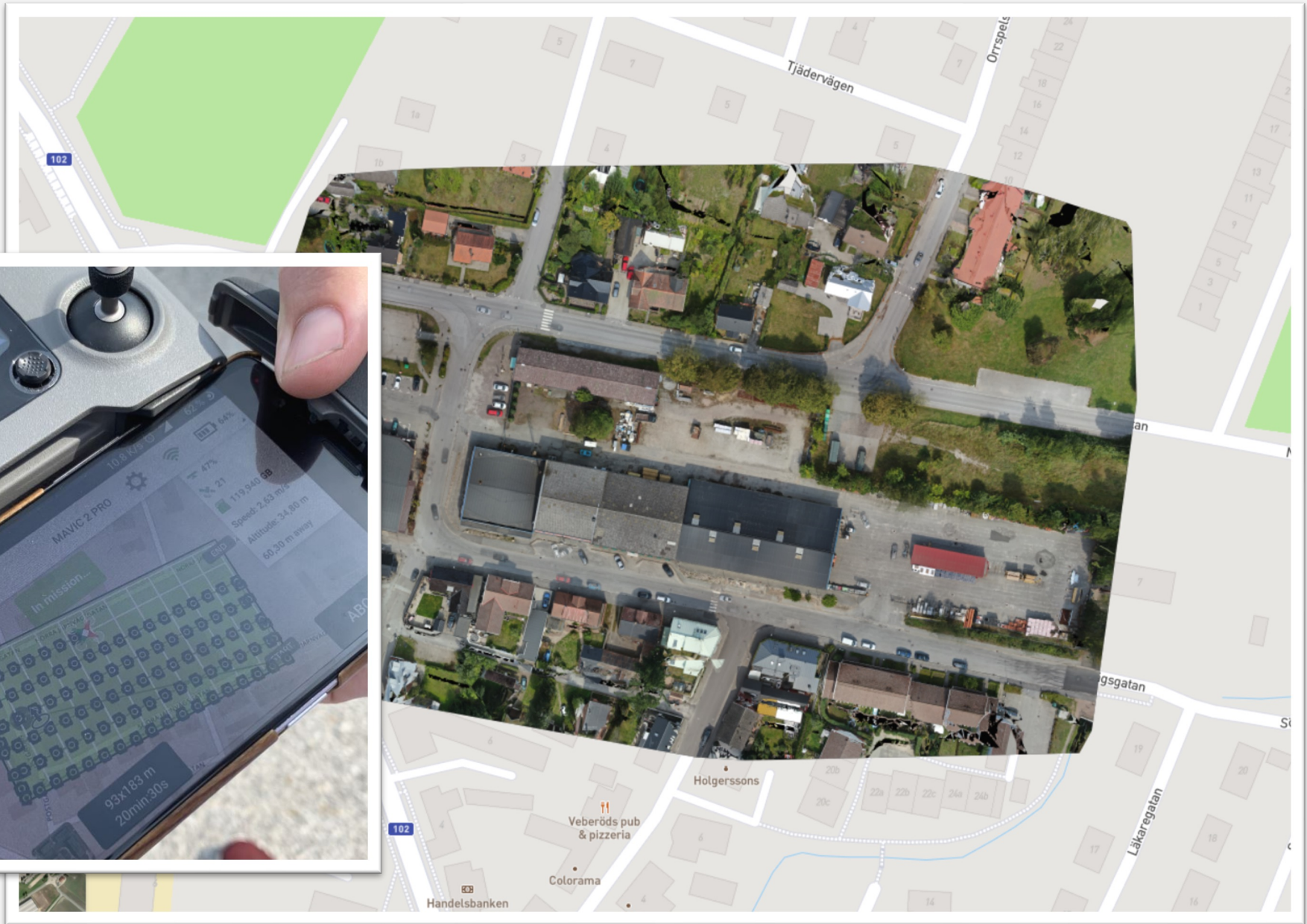
# Smart lamp posts





## 3D-model of Veberöd – To what use?







Felanmälan väg.  
nr 12b

Bank ID Login: Jan Malmgren

Djupt hål, ca 30 cm.



- IoT grupper
- VA
  - Grindar
  - Larm
  - Träd

# With a digital twin its possible to measure what sustainability really is



Smartabyar.se

- VA
- Grindar
- Larm
- Träd



Strip\_drip\_veb5  
open Temp: 4,4°

Strip\_drip\_Lekplats\_Veb4  
open Temp: 5,0°

Strip\_drip\_veb7  
open Temp: 18,7°

Strip\_drip\_Romelevallen\_  
open Temp: 5,8°

Stöldlarm Hub  
Alarm Proximity: 622  
Fuktalarm Fukt: 44% Temp: 18°

Busskur\_veb3  
open Temp: 5,6°

rip\_Veb6  
open Temp: 4,5°

Grind Tegelstugans försk  
open Temp: 18,4°

Grind Idala Förskola  
closed Temp: 3,8°

Grind Lammets förskola  
closed Temp: 4,3°

Strip\_Drip\_Liabacken\_Veb  
open Temp: 6,0°

Smart träd Annelund  
0

- IoT grupper
- VA
- Grindar
- Larm
- Träd

Visualize in 3D

Report Faults

Health

My dog

Doors

Emergency

Energy

Traffic

Water

Building permits

Security

Service



Stöldlarm Hub  
Alarm:no Proximity:622

Strip\_drip\_veb7  
open Temp: 18,7°

Strip\_drip\_Romelevallen\_  
open Temp: 5,8°

Grind Idala Förskola  
closed Temp: 3,8°

ammets förskola  
closed Temp: 4,3°

Strip\_Drip\_Liabacke  
open Temp:

Fuktlarm  
Fukt:44% Temp:18°

Strip\_Drip\_Veb6  
open Temp: 4,5°

Grind Tegelstugans försk  
open Temp: 18,4°

AI can help to see connections



Smartabyar.se



## Smarta Byar Hub







# Smarta byar hub – FabLab – Veberöd - MIT







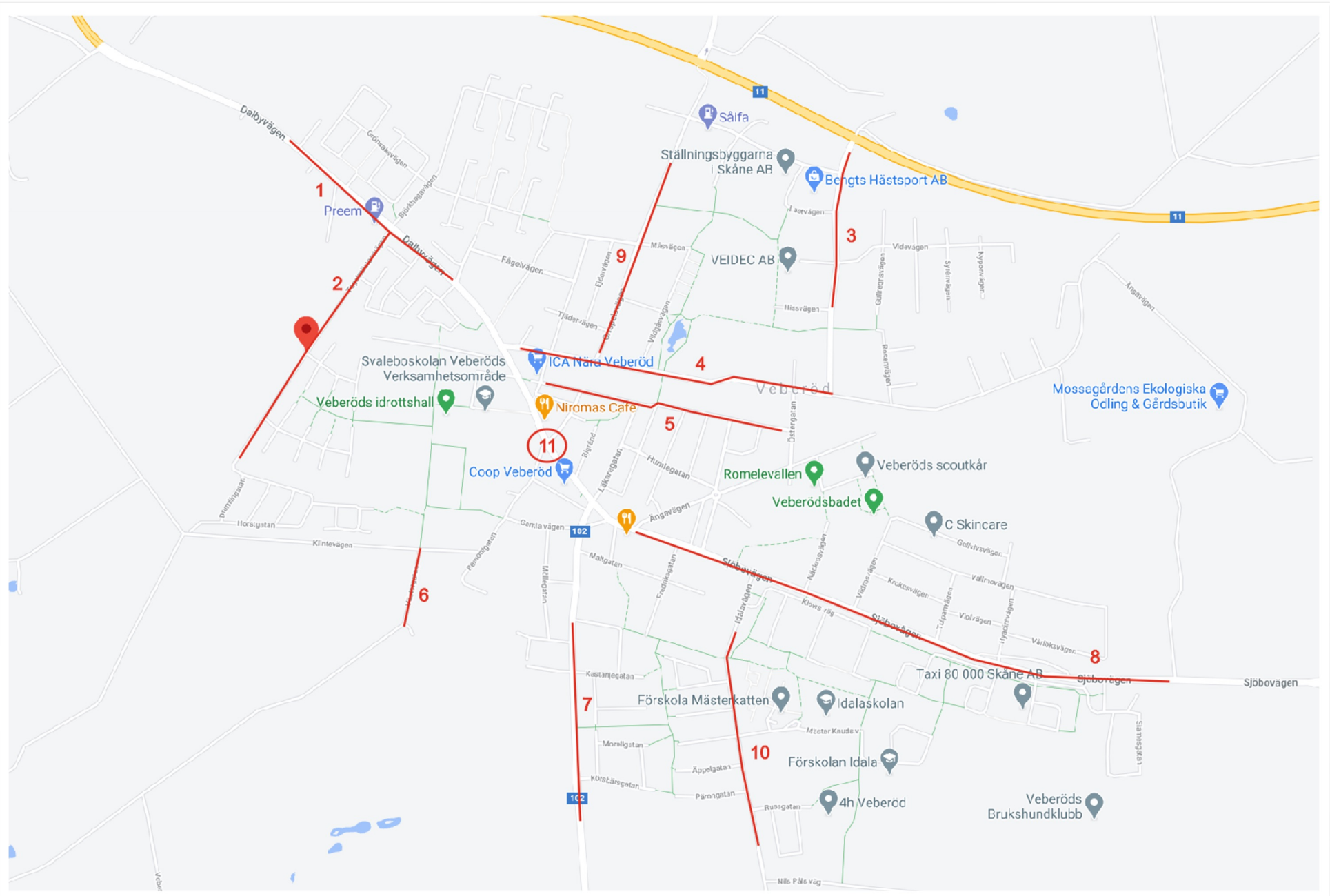
# Mobility

## 15 minute-cities



# IoT-Projekt for traffic Flow





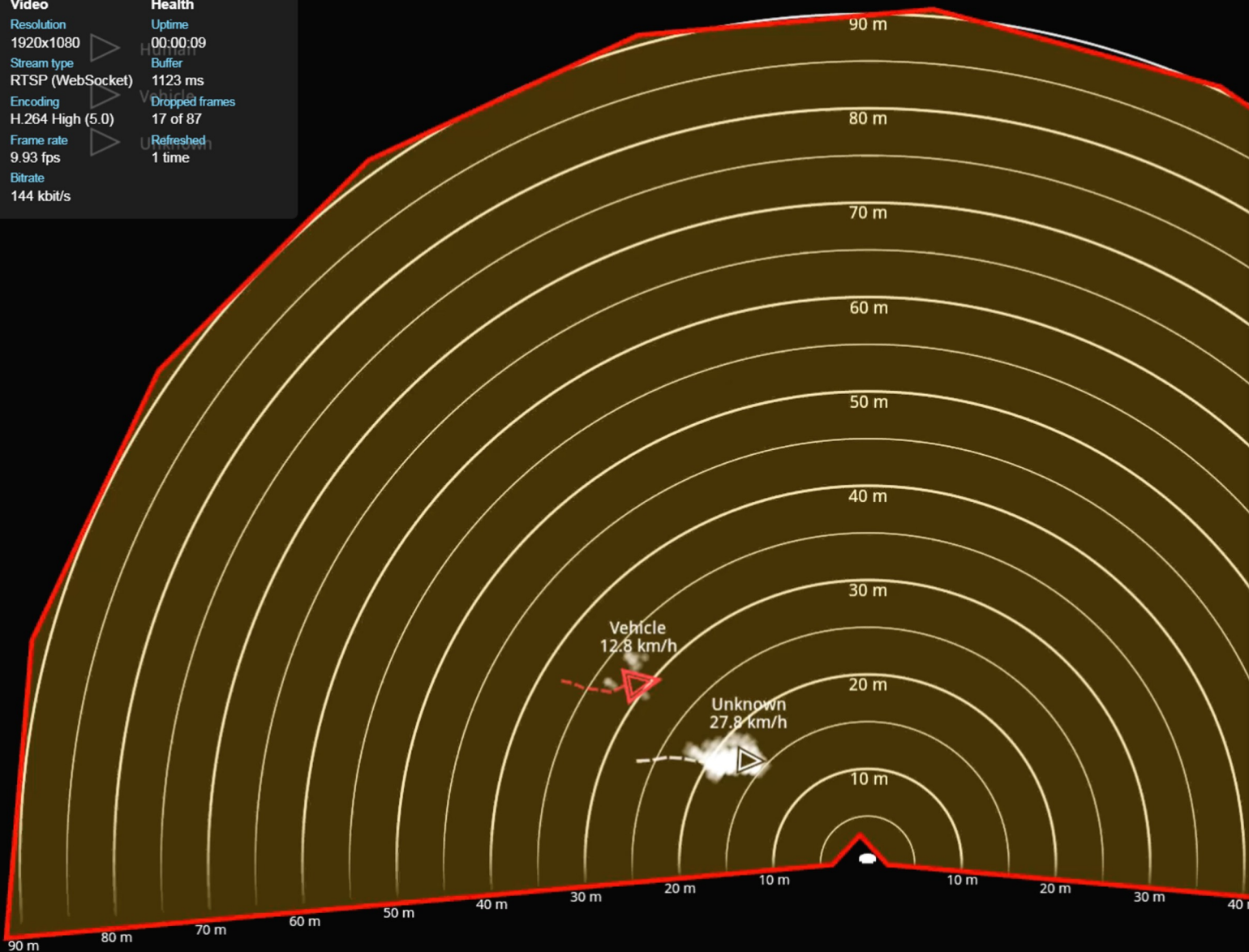
Client stream information

Video


Resolution  
1920x1080  
Stream type  
RTSP (WebSocket)  
Encoding  
H.264 High (5.0)  
Frame rate  
9.93 fps  
Bitrate  
144 kbit/s

Health

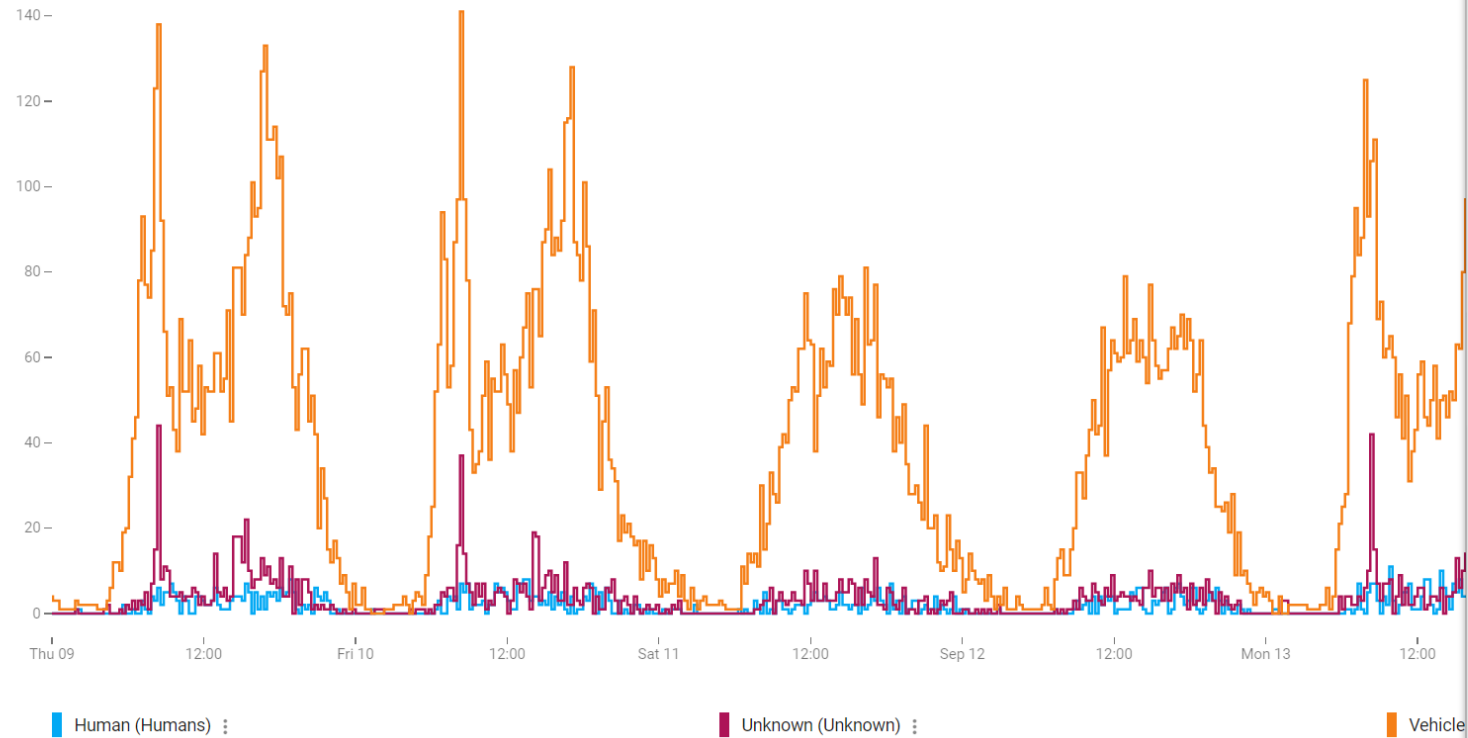
Uptime  
00:00:09  
Buffer  
1123 ms  
Dropped frames  
17 of 87  
Refreshed  
1 time



# AVEVA™ Insight

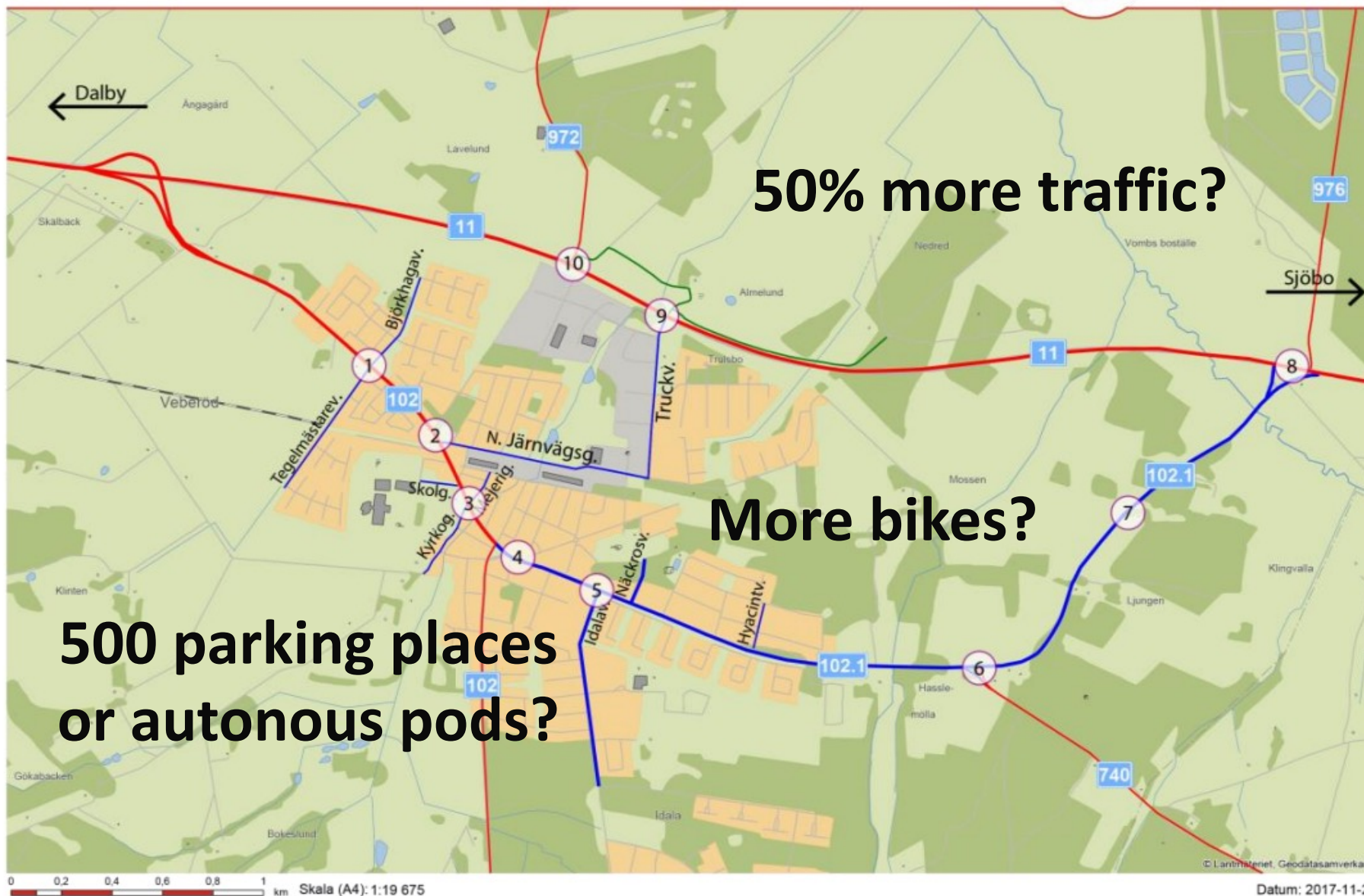
Radar Count Average per 15 Min 

< > 09/09/2021 00:00:00 - 15/09/2021 14:21:06

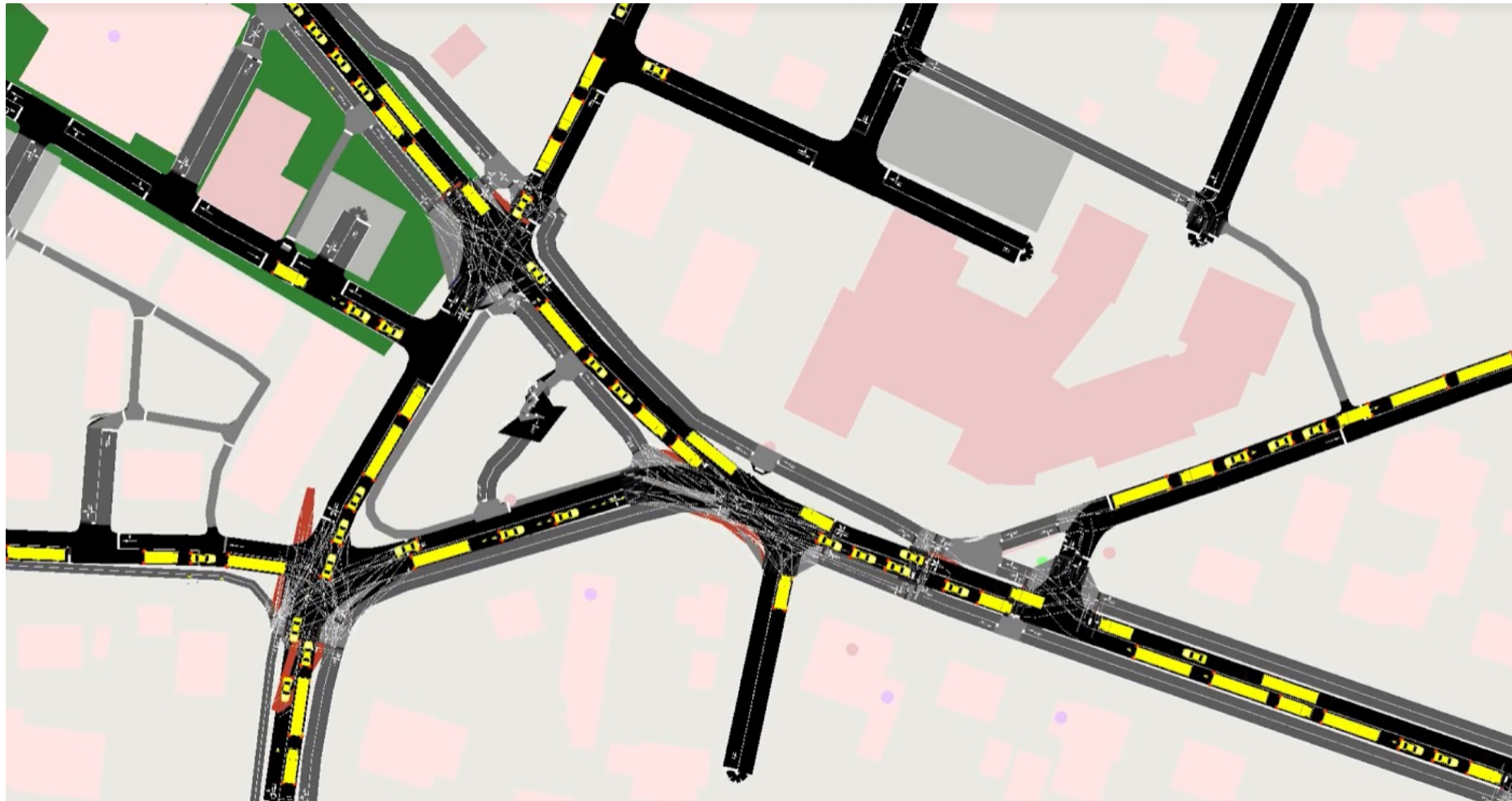








Figur 15: Karta som visar identifierade problempunkter, (Väghållaransvar, röd = statlig, blå = kommunal, grön = enskild).





Ändra vägar virtuellt och se effekter...





**Visualize - Vote - Build**



# New areas



# New areas



# Wetlands and playgrounds









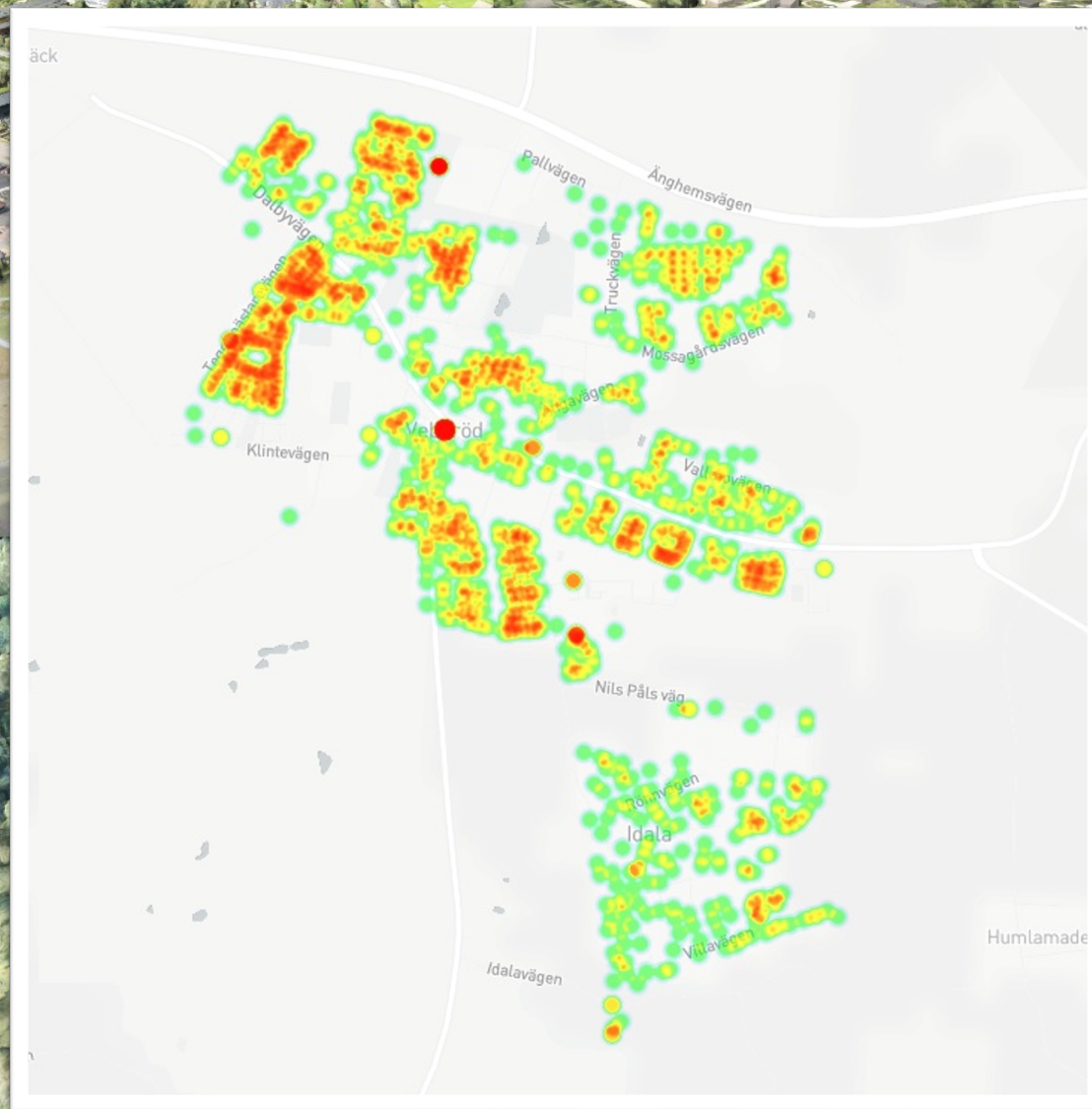
# Social sustainability



**Mobility...**  
**Time and money...**

**But also social!**

# Heatmaps





# Change of society?



**Digitization reduces distances and strengthens rural areas.**

**Villages no longer need to grow into cities, to provide service.**



# Change of society?



**Cities can be said to consist of villages**

**Export Village feeling to cities**





**Urban and rural areas has different  
needs and strengts.**

**Thank you!**