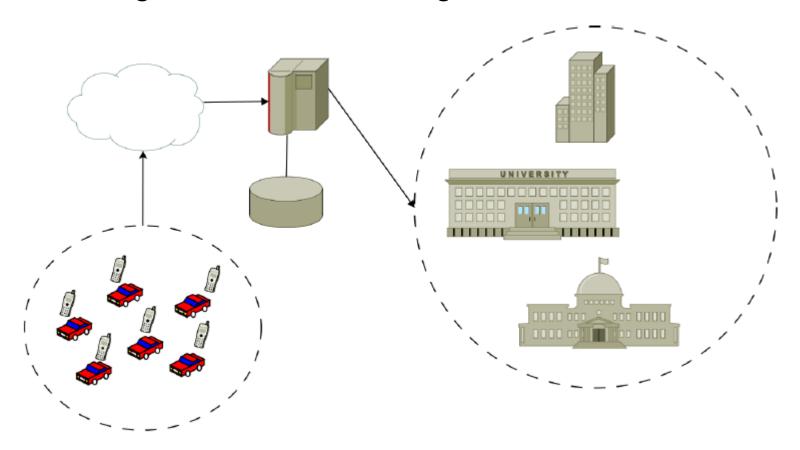


# Automobile Sensors for Environmental Monitoring



### **Vision**

 Leveraging existing car sensors towards environmental modelling and decision making





# **Principle**

- Gathering automobile sensor data utilzing a common OBD2 reader (~ 20 €)
- Analysis of collected data on the server



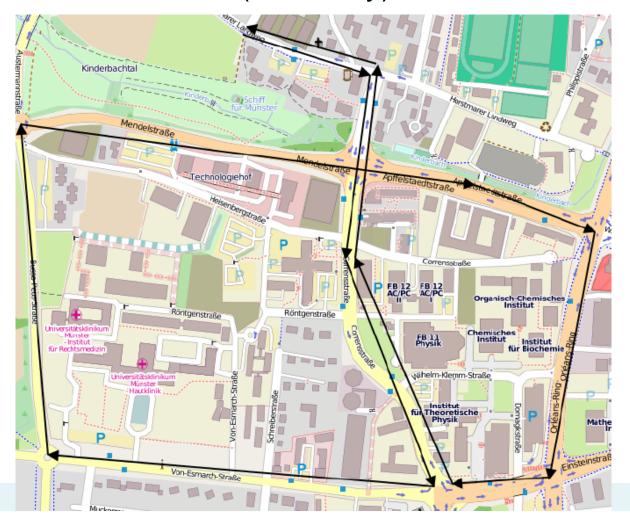
OBD2 is an openly defined interface giving access to a broad set of sensors

→ http://en.wikipedia.org/wiki/OBDII\_PIDs



## **Evaluation**

Test track in Münster (Germany)





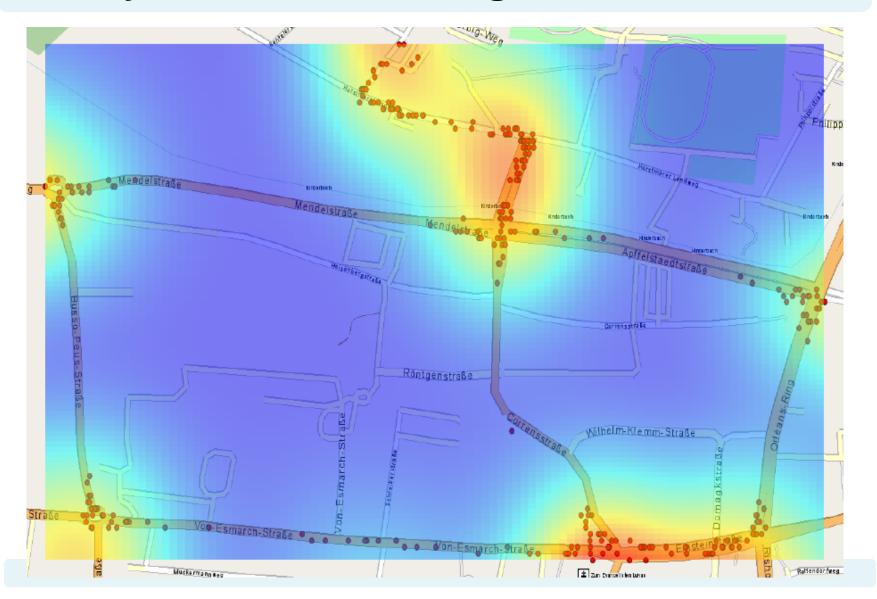
## **Evaluation**

#### Test cars

	Hersteller	Modell	Fahrzeugklasse	Baujahr	Kraftstoff
1	KIA	Picanto	Kleinstwagen	2005	Benzin
2	BMW	118d	Kompaktklasse	2005	Diesel
3	BMW	525d	Obere Mittelklasse	2007	Diesel
4	Mercedes	E 220 CDi	Obere Mittelklasse	2010	Diesel
5	Hyundai	Santa Fe	SUV	2009	Diesel
6	Saab	9.3 1.9 TiD	Cabrio / Sportwagen	2006	Diesel

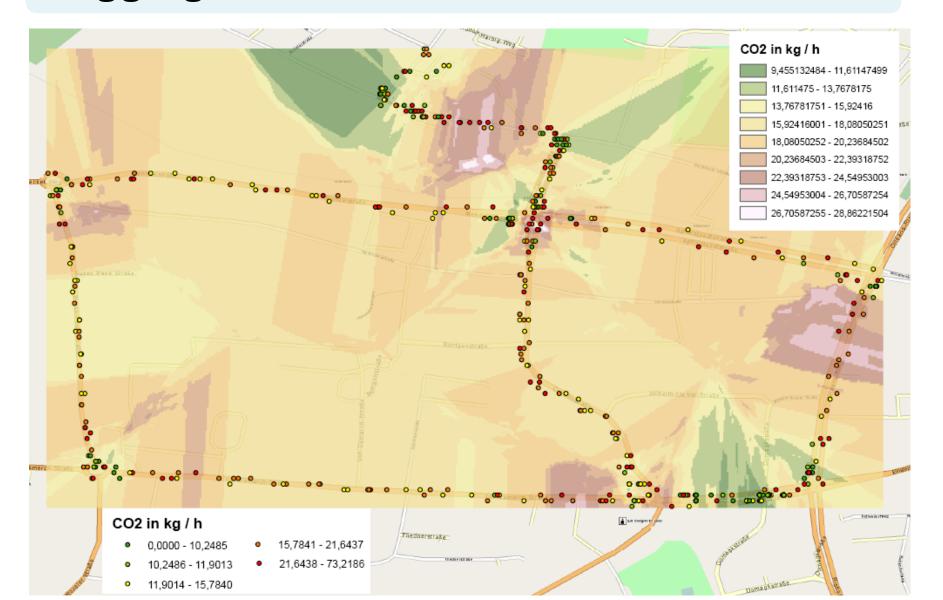


# **Analysis of Car Standing Times**



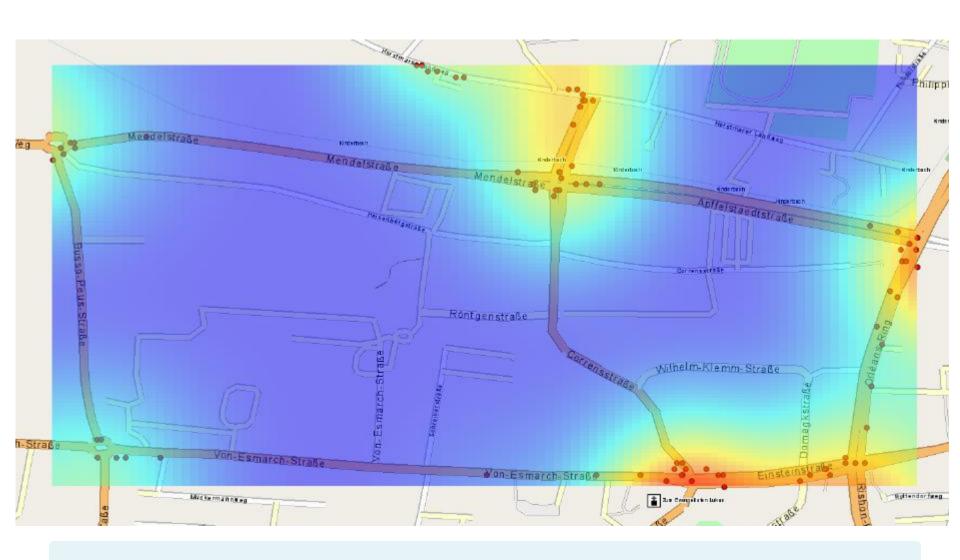


# **Aggregated CO2 Emmission**





# **Produced Noise derived from RPM**





#### **Questions?**

Thank you!



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