## **SWARCO** MYCITY

HOW TO SOLVE BAD AIR QUALITY IN URBAN AREAS?

### THE PROBLEM



- 3.4 Million deaths linked to outdoor air pollution globally
- 97% of cities in low and middle-in**come** countries do **NOT** meet WHO air quality guidelines
- 49% of cities in high-income countries do NOT meet WHO air quality guidelines
- Costs 1 Trillion **Euros per year**



#### **POLLUTION** AS NOISE, BAD AIR, LIGHT **CAUSES**:

- The risk of stroke
- Heart disease
- Lung cancer
- Chronic and acute respiratory diseases, incl. asthma

Pollution is causing more than three million premature deaths worldwide



### HOW DID IT GET SO POLLUTED?

- **Urbanization:** More and more crowded cities
- Pollution from human waste as cooking, heating etc. and it will increase even more
- Day to day traffic
- In the past, pollution was an acceptable by-product of urbanization
- Today, it's not the case

# **MYCITY AS A** SOLUTION



DATA COLLECTION

Sensor:

**ENVIRONMENTAL DATA** 









TRAFFIC DATA













APPS, IN-VEHICLE DATA



**PROCESSING** & STORAGE

**DATA VISUALIZATION** 









**ALERTS &** NOTIFICATIONS e.g. too high CO2 levels



REPORTING TO ANALYZE IMPROVE-**MENTS** 



ACTIONS



E.G. Make green-time shorter in the suburb for cars entering the



**REROUTING TRAFFIC** 

E.G. Trigger new scenarios where traffic is steered away from highly congested areas



SPEED **ADJUSTMEN** 

adjustment

High speed & CO2 are higly connected. Lower the speed for less emission



**REAL-TIME DATA** SHARING E.G. Tolling system get informed about the air congestion leading to a dynamic price





- + Health
- + Smoother journeys
- + Multimodal alternatives
- + Less noise
- + No congestion



- + Meet WHO goals + Sustainable city
- + Save money
- + Attractive city + Image



- + Less hours spend on monitoring
- + Easy to use system

**OPERATOR** 

+ Can add needed features at any time



- + Increase in multi-
- modal travelers + Increased income
- + More space

