Airview Project Dublin

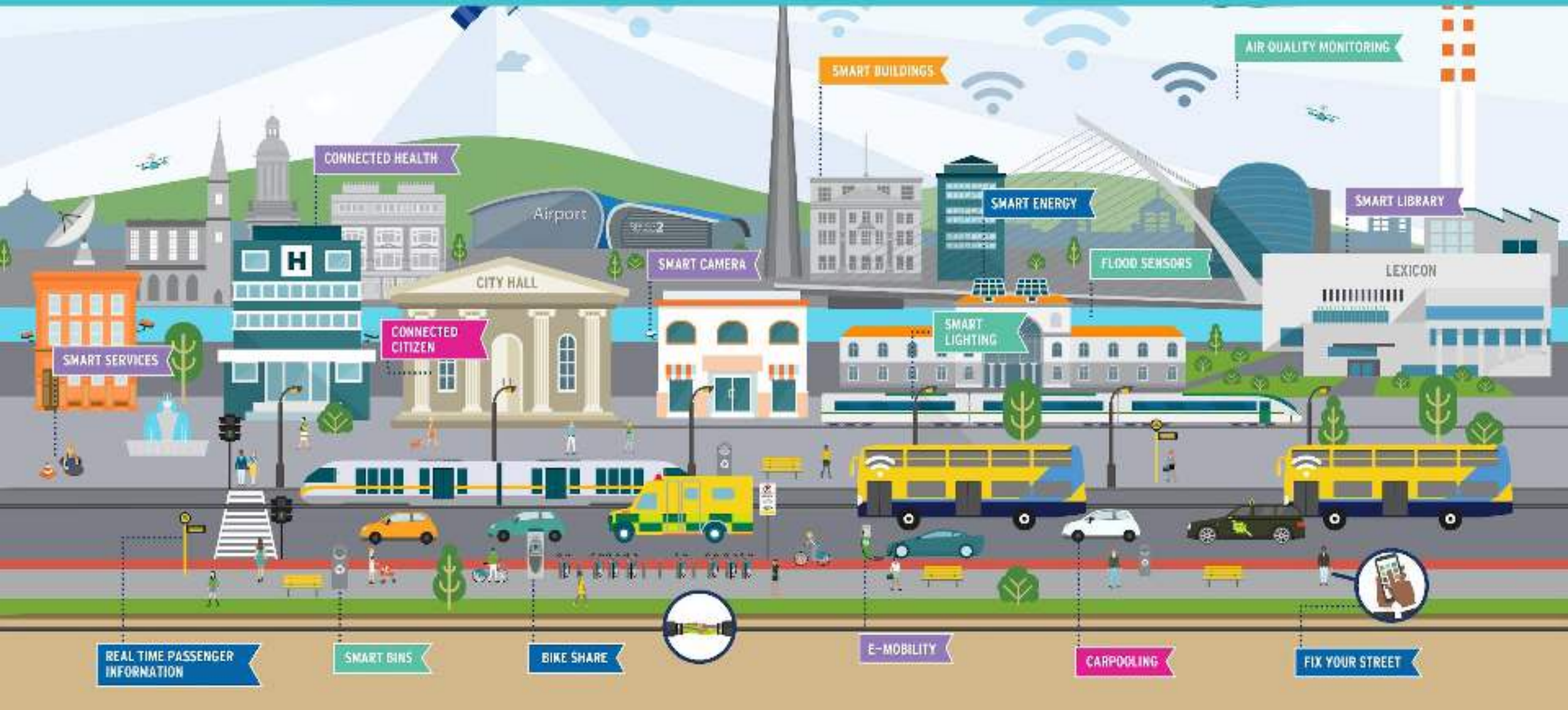
Comhairle Cathrach Bhaile Átha Cliath
Dublin City Council

SMART DUBLIN

Google

WHAT IS A SMART CITY?

Real Time - Connected - Data Driven



WHAT IS SMART DUBLIN?

IT IS AN INITIATIVE OF THE **FOUR DUBLIN LOCAL AUTHORITIES** TO ENGAGE WITH SMART TECHNOLOGY PROVIDERS, RESEARCHERS AND CITIZENS TO SOLVE CHALLENGES AND IMPROVE CITY REGION LIFE.

Smart Dublin was initially launched in March 2016

SMART DUBLIN

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Dublin City Council

dlr
Comhairle Contae Átha Cliath
County Council

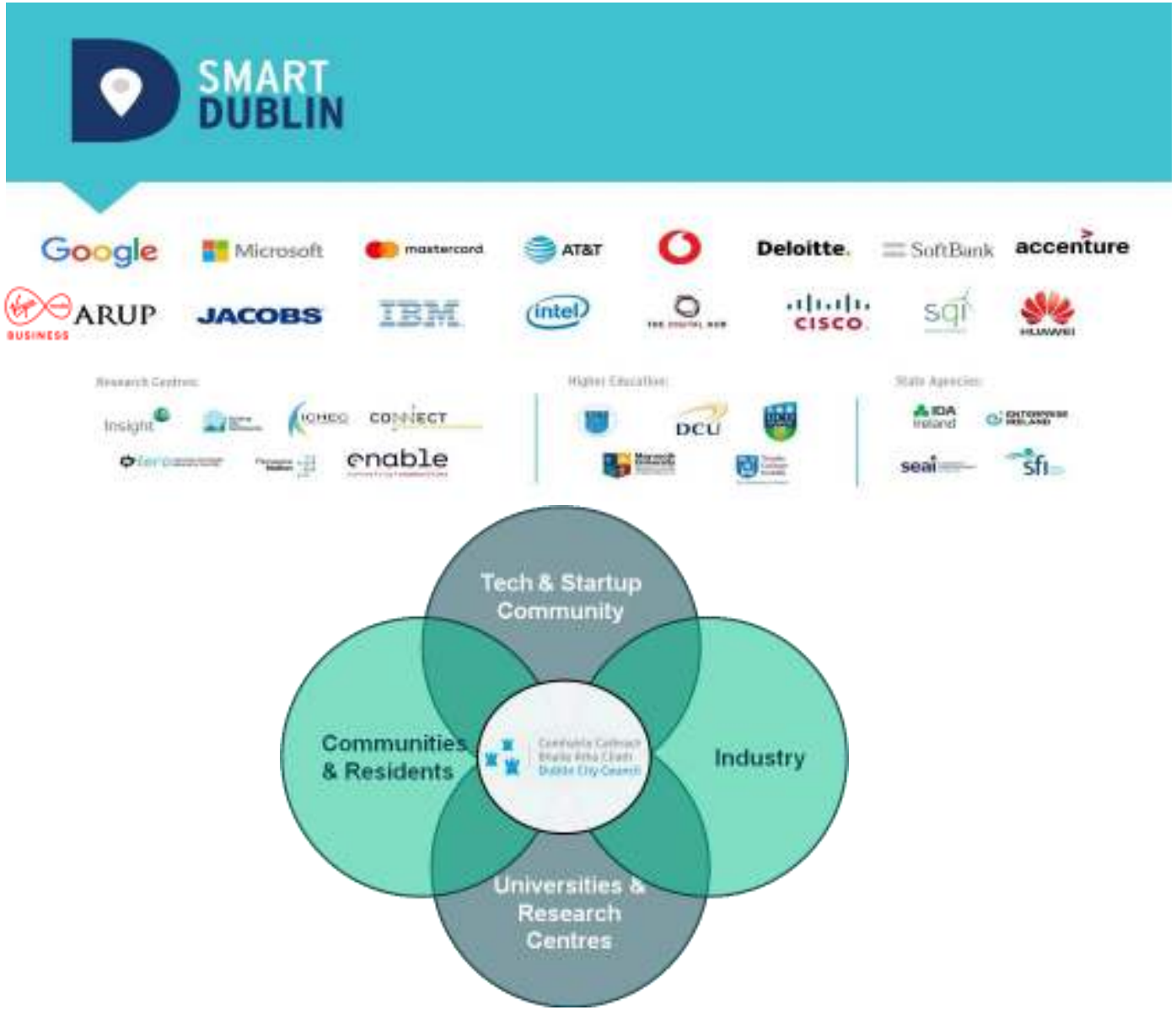
Comhairle Contae Fhine Gall
Fingal County Council

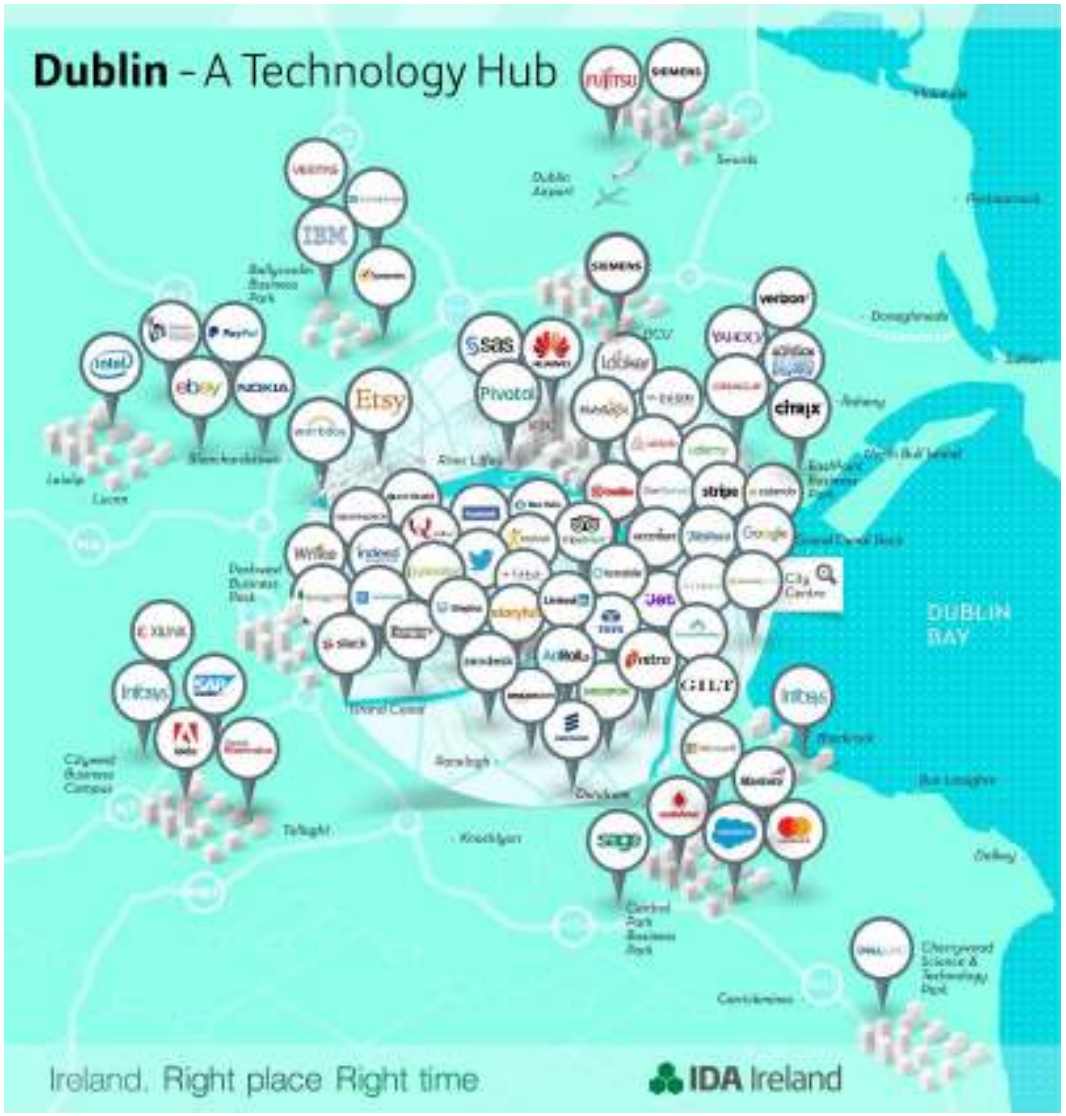
Comhairle Contae Átha Cliath Theas
South Dublin County Council

DUBLIN AS A TESTBED

> **WE ARE BIG ENOUGH YET SMALL ENOUGH TO BE THE IDEAL LOCATION TO PILOT NEW CITY SERVICES & SOLUTIONS**

TAPPING INTO DUBLINS ECOSYSTEM





Air Quality Data: Why do we need it?

TU DUBLIN

QUEEN'S UNIVERSITY BELFAST

AIR POLLUTION AND MORTALITY ON THE ISLAND OF IRELAND

Estimating Local All-Cause and Circulatory Mortality Burdens Associated with Fine Particulate Matter Pollution in Northern Ireland and the Republic of Ireland

Cork and Dublin among best European cities for air quality, study shows

European Environment Agency analysis shows 90% of city dwellers across the EU are exposed to harmful levels of air pollution

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Concern over rising air pollution in blackspots around Dublin

Nitrogen dioxide levels across the city are growing again as lockdown restrictions lift

Effect of air-pollution control on death rates in Dublin, Ireland: an intervention study

Luke Clancy [1], Pat Goodman, Hamish Sinclair, Douglas W Dockery

Affiliations + expand

PMID: 12401747 DOI: 10.1016/S0140-6736(02)11281-5

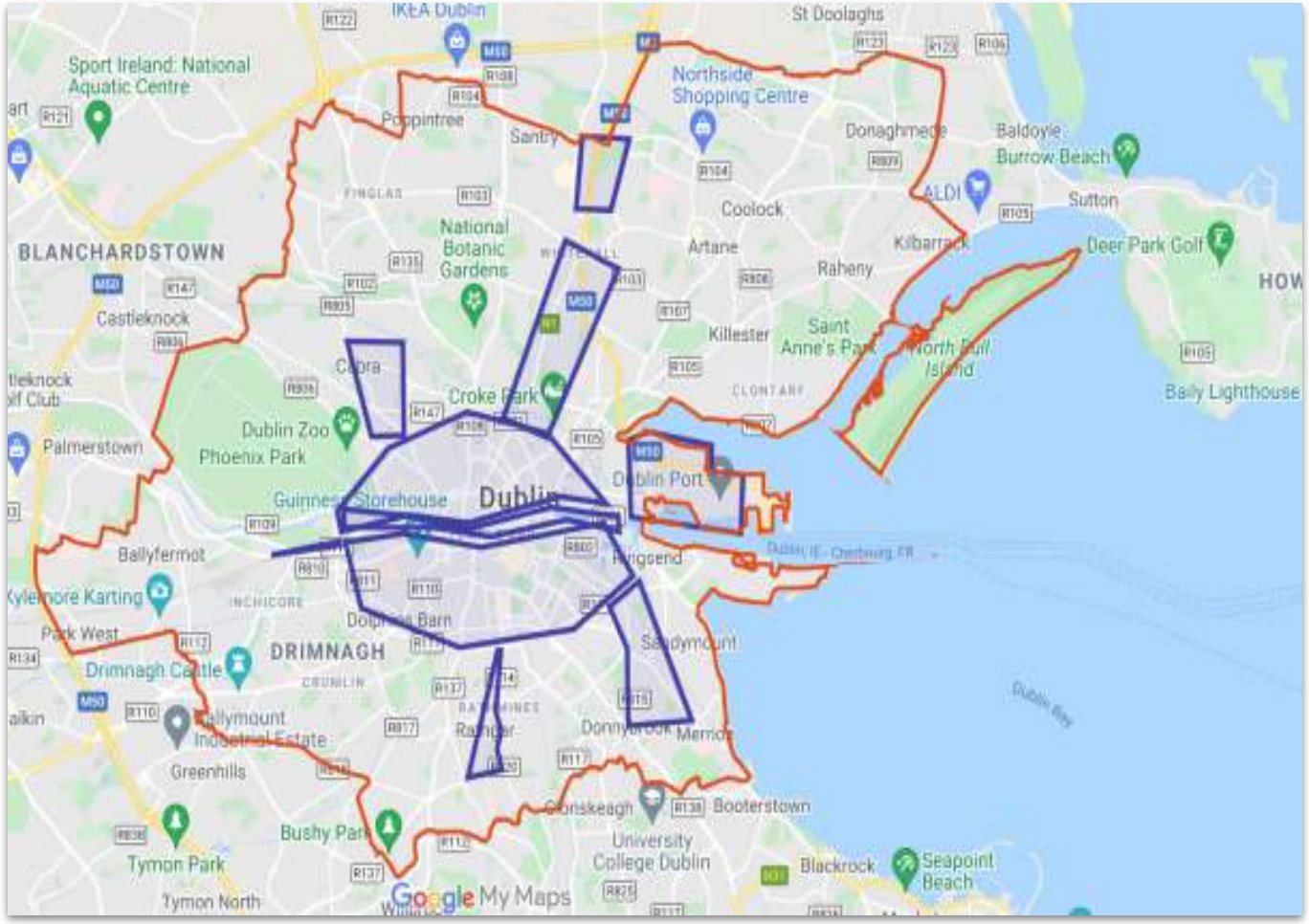
Abstract

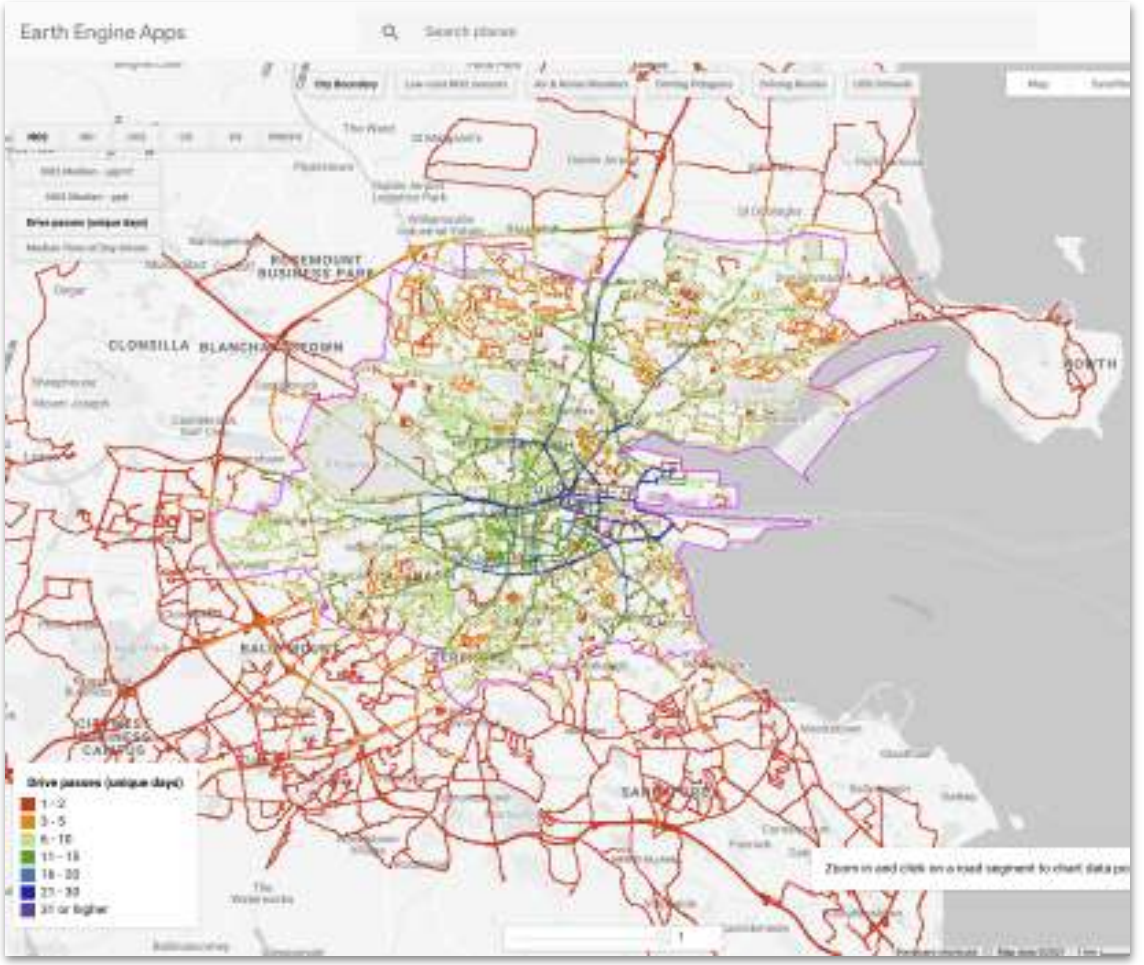
Background: Particulate air pollution episodes have been associated with in
However, there is little direct evidence that diminished particulate air pollutio
lead to reductions in death rates. We assessed the effect of air pollution cont
sales--on particulate air pollution and death rates in Dublin.

Methods: Concentrations of air pollution and directly standardised non trau
cardiovascular death rates were compared for 72 months before and after th
Dublin. The effect of the ban on age-standardised death rates was estimated
time-series analysis, adjusting for weather, respiratory epidemics, and death
Ireland.

81% of people believe that Dublin has a problem with air pollution - Asthma Society of Ireland launches #OwnOurAir Campaign

Driving Map / Study Site





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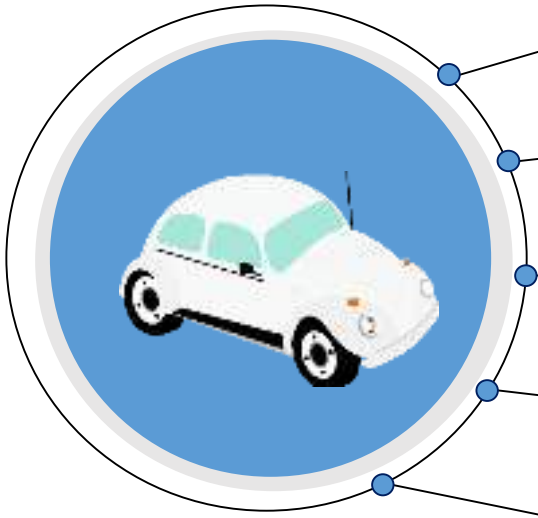
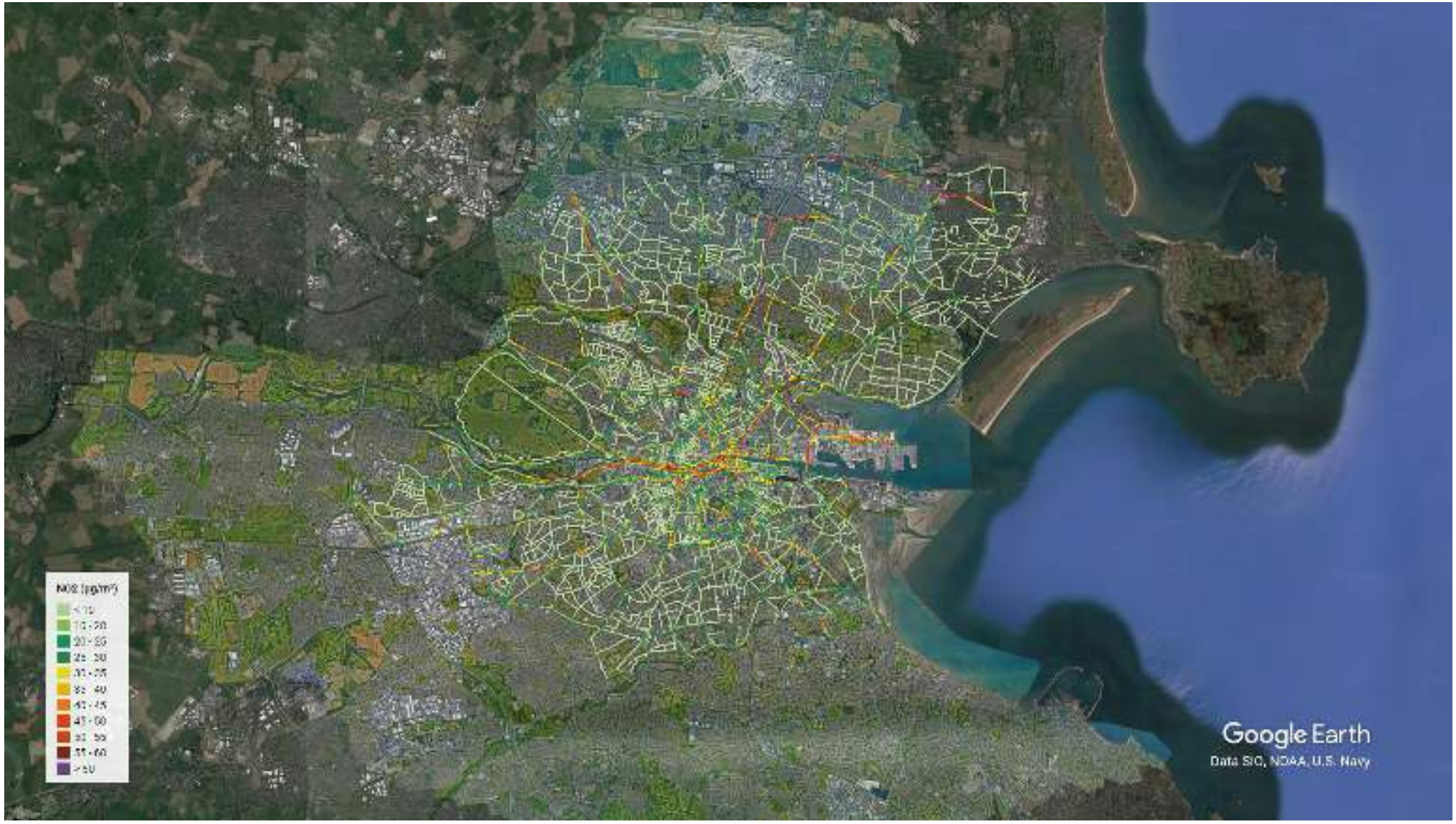
Key Highlights



- Google's Streetview car with Aclima Sensor
- May 2021 to May 2022, Monday-Friday, ~ 9:00-17:00
- Measured PM 2.5 CO, CO2, NO, NO2, O3 every second
- Over 50 million measurement points
- Covered over 45K road segments



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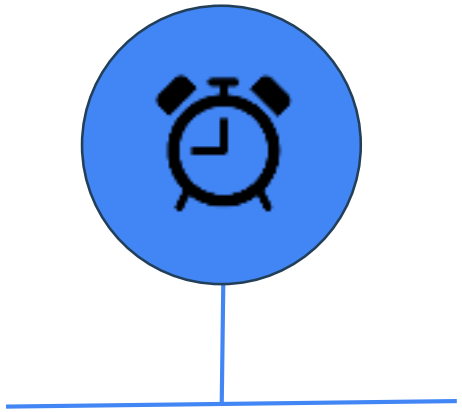
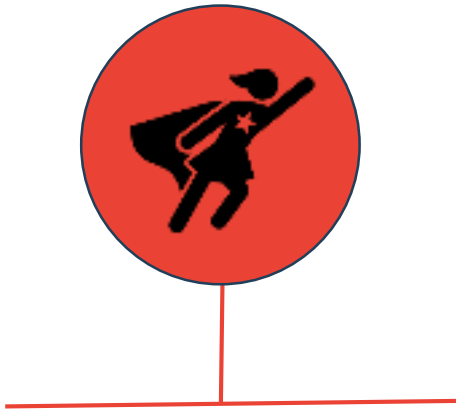
Open Data Engagement fund

Data Hackathon with 50+ Million Open Data Points

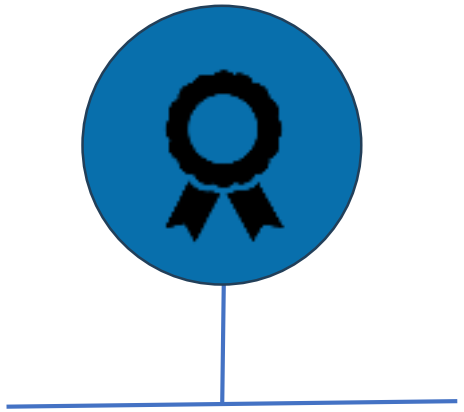


2 Days



100+
Participants

4 Challenge
Area



3 Winners

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DATA.GOV.IE

AIR QUALITY
DATAHACK

The Winners

Team Definitely not chat GPT

Measuring the hyperlocal air quality near Dublin Hospital by utilizing traffic data to map emissions data

Team Pheonix

A vulnerability mapping of the exposure to air quality using machine learning techniques.

Team Aerlytics

Improving air quality in schools by identifying high-risk schools using air quality data and geo-coded primary schools

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Thank You!

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