OGC CityGML Hackathon

Datasets available for practical work
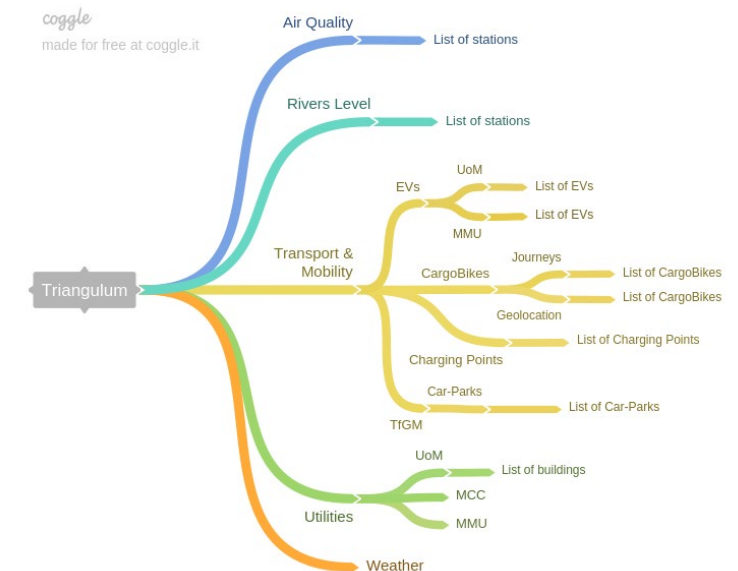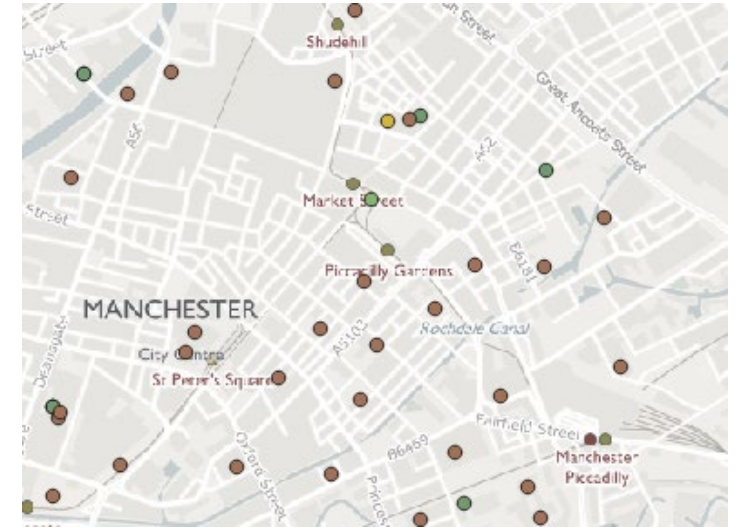
Izabela Hurst

Ordnance Survey

Main sources of data

- **Manchester-I**

    – portal for city related data, real-time data sources Hub

    – created through the EU's Horizon 2020 project 'Triangulum'

    – Data generated from two projects: 'Triangulum' and 'CityVerve' which aim to build and deliver a smarter, more connected Manchester, creating a city that uses technology to meet the complex needs of its people

    – Triangulum – focused on specific interventions in energy, mobility, ICT and the use of data in applications

    – CityVerve – pioneering the use of IoT technologies to redefine 'smart' in the context of living, working city.
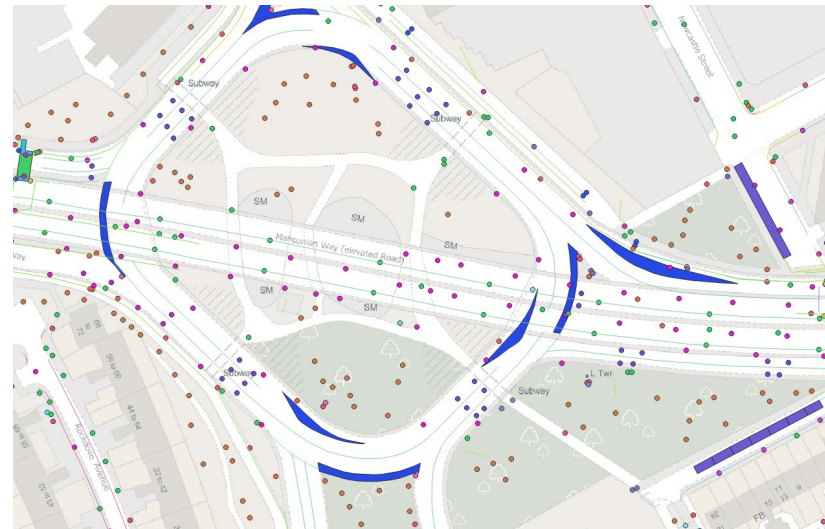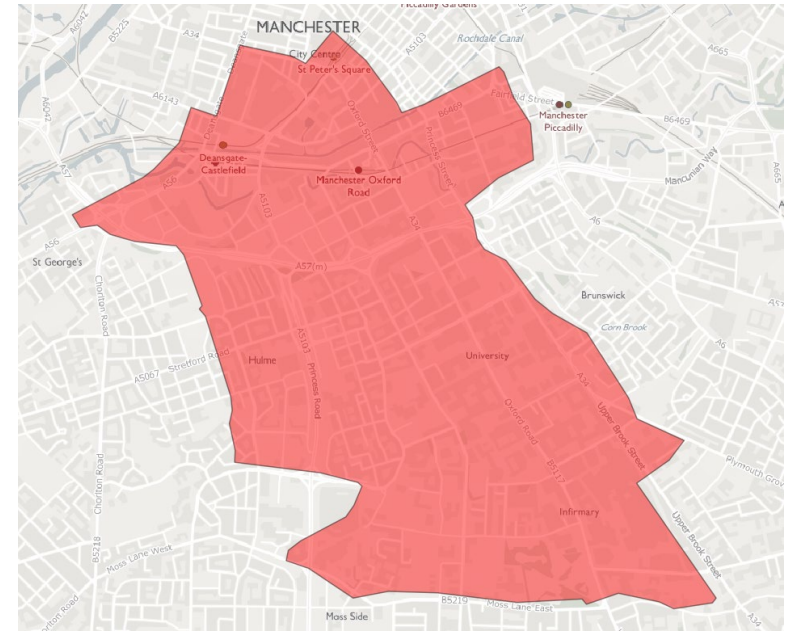
Main sources of data

- **Manchester-I** - available data:
  - Utilities - energy consumption for University of Manchester estates;
  - Air quality – air quality measures from DEFRA;
  - Rivers level - water level measured in a number of keypoints across the river and canal system of Greater Manchester;
  - Weather – data collected from the Whitworth Meteorological Observatory
  - Transport and mobility – car parks, EV charging stations, sessions and journeys, cargo bikes
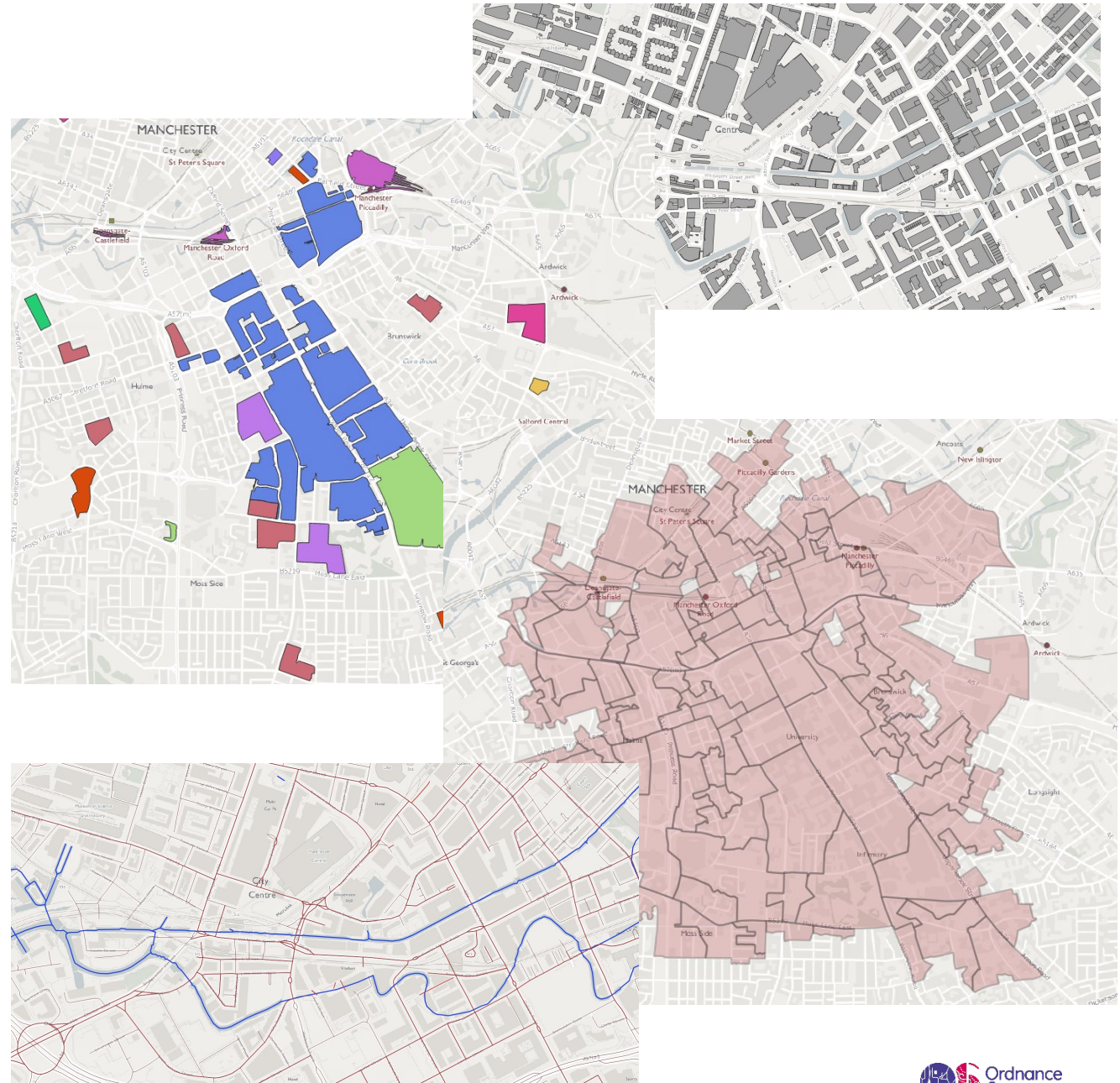- **TfGM** - cycle counters for 10 locations in Manchester

Main sources of data

- **Ordnance Survey – data created for CityVerve project:**

  – Street asset line features eg road markings, street furniture

  – Street asset points from eg tree, litter bin, street lamp

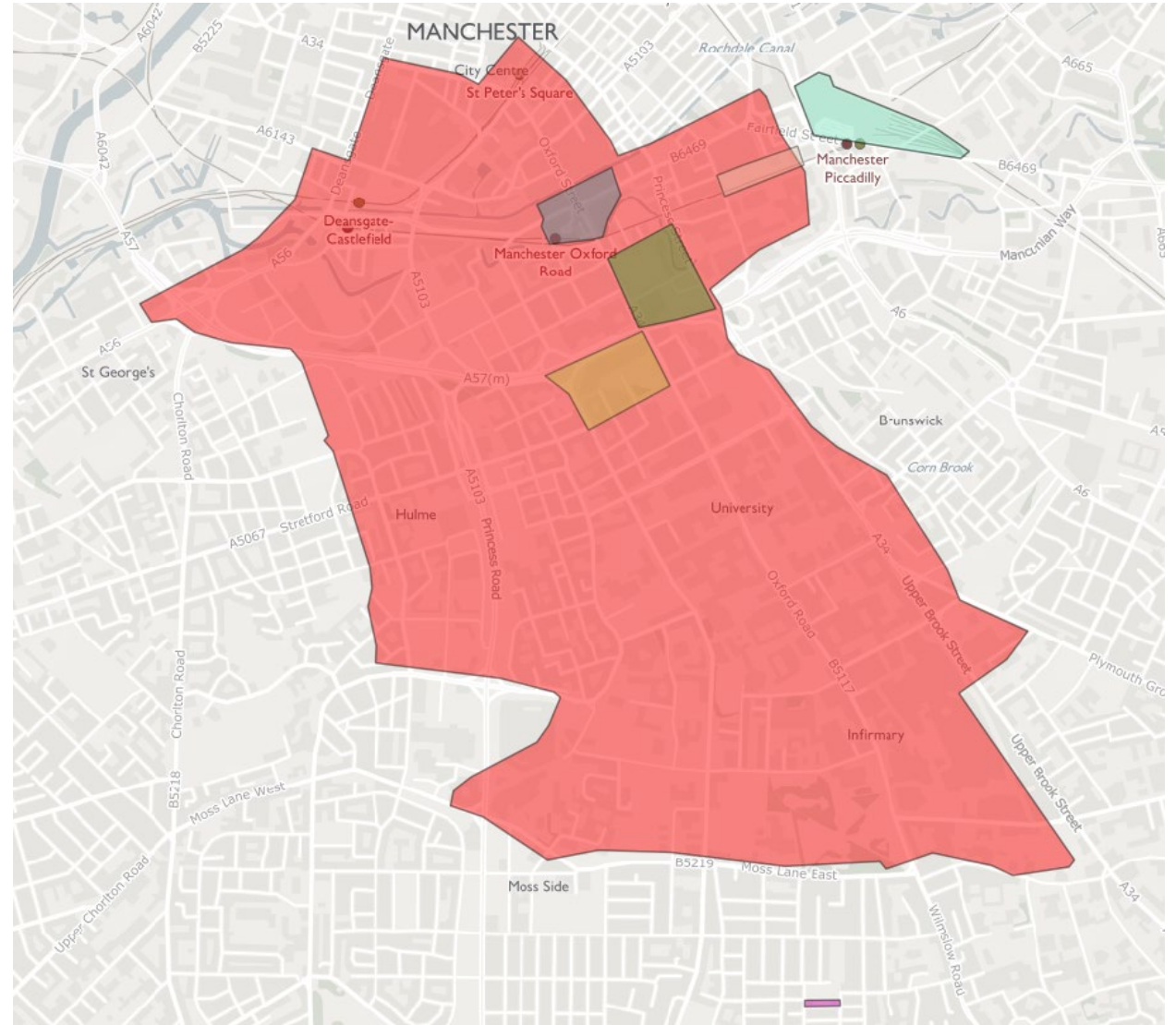 – Street asset polygons eg parking bay, box junction, traffic island

Main sources of data

- **Ordnance Survey – datasets derived from OS Products:**

    – Topographic areas, greenspaces, functional sites with access points, wards, OS Boundary Line and ONS lookup data

    – Addresses, points of interest, postcodes

    – Watercourse links, road links, streets
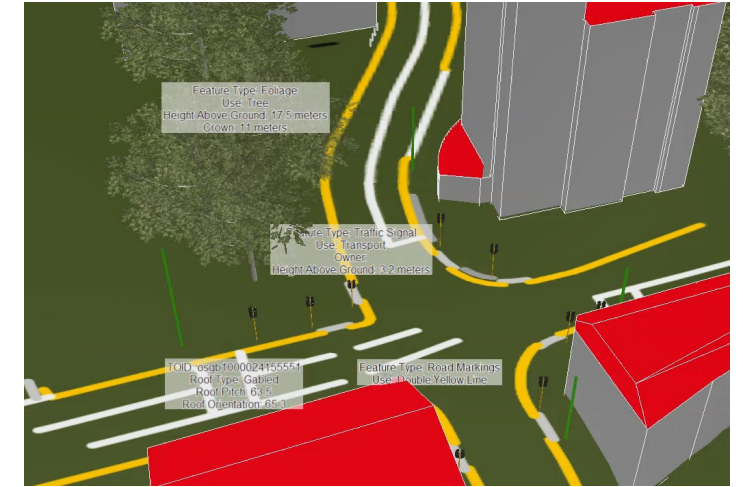
Ordnance Survey

Main sources of data

- **Ordnance Survey – AOIs:**
  - Whitworth_Str_Oxford_Rd
  - MMU All Saints
  - Piccadilly Station
  - Charles Street
  - Sackville Building Granby Road
  - Heald Avenue

Ordnance Survey
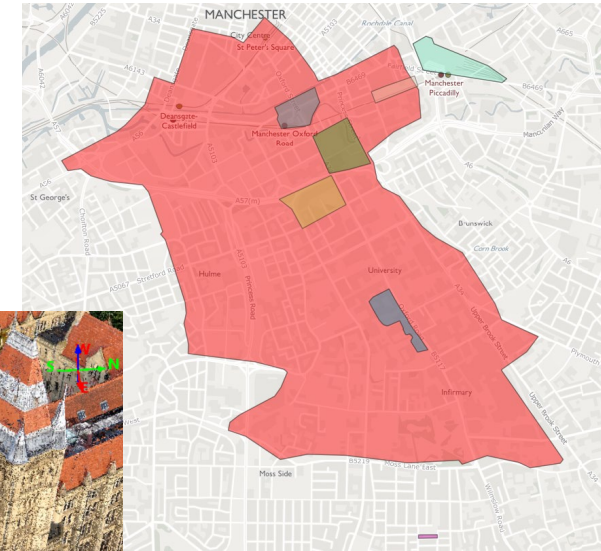
Main sources of data

- Datasets available for AOIs:
  - DSM
  - DTM
  - CityGML – LOD1 and LOD2
  - Orthoimagery
  - Building Footprints
  - 3D Mesh tiles

Main sources of data

- **Ordnance Survey – Manchester UAV data:**

  – DEM

  – Point Cloud

  – Orthorectified imagery

- **Ordnance Survey – other data:**

  – OSHQ Blender model

  – CityGML v2 data from Manchester and Singapore

Native BIM

IFC

CityGML

Virtual Singapore

Ordnance Survey