OECD Centre for Entrepreneurship, SMEs, Regions and Cities and its Geospatial Lab

Tapping into Mobility:
Leveraging Mobile Phone Data for
Spatial Analysis and Statistics

Technical workshop

14 May 2024 | 09:00-12:45 (Paris time)
OECD Conference Centre - Room CC18,
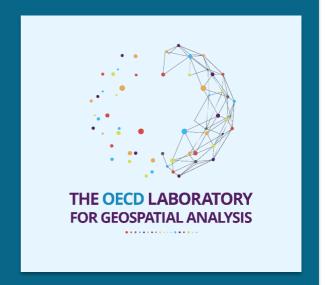and Zoom

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AGENDA

OECD

■ The OECD Geospatial Lab

The OECD Laboratory for Geospatial Analysis (Geospatial Lab) is an international community of stakeholders from the public, private, and not-for-profit sectors, working together to develop and disseminate policy-relevant analyses based on geospatial information.

https://www.oecd.org/regional/regional-statistics/geospatial-lab.htm

■ The Workshop

The imperative to modernise official statistics has long been evident in light of swift transformations and global trends. While many National Statistical Offices around the globe have started such endeavour since more than a decade ago, the overall process of modernisation is a complex one and involves many aspects, from changing production environments and accessing new data sources, to recognising and adapting to evolving user expectations.

During the last two decades, rapid advances in Web and mobile technologies have generated an exponential growth in the deployment of pervasive systems, such as cellular networks, GPS devices, and WiFi hotspots, which produce massive amounts of real-time, large-scale, and granular spatiotemporal data.

How can we seize the opportunities provided by these new types of data? How can we use them to better understand human mobility patterns and inform policies? How are we able to overcome challenges related to data access, processing and integration in already existing data pipelines?

The workshop will help to address these questions, drawing from the experience of National Statistical Offices and international organisations, and enlarging the discussion to other interested stakeholders, such as mobile phone data providers.

■ Venue of the meeting

OECD Conference Centre, Room CC18 and Virtual meeting over ZOOM.

To participate, please register here. A confirmation email and a link with log-in details will be sent to all participants.

■ Language

The workshop will be held in English.

■ Contacts

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■ Agenda

Tapping into Mobility: Leveraging Mobile Phone Data for Spatial Analysis and Statistics

Tuesday

Tuesday
14 May 2024

09:00 – 09:10	SETTING THE SCENE

PRESENTER   Rudiger AHREND (OECD)

09:10 – 10:50	TECHNICAL PRESENTATIONS

Moderator: Claudia BARANZELLI (OECD)

PRESENTERS

An overview of alternative data sources in official statistics

Rebecca HUTCHINSON (U.S. Census Bureau)

The US Census Bureau is utilising data obtained from a variety of alternative data sources to improve and enhance the official statistics it produces. These data have helped the Bureau produce higher-frequency and more geographically-detailed data products, supplement traditional survey data collection, alleviate respondent burden, and assist with declining survey response rates. This presentation will highlight some of the alternatives data sources the Census Bureau is using and the associated benefits and challenges of each. Additionally, the presentation will cover the importance of conducting a quality review of alternative data sources to ensure fitness for use.

Reusing Mobile Network Operator data for Official Statistics: steps towards a common methodological framework for the European Statistical System

Fabio RICCIATO (EUROSTAT)

The talk provides a bird's-eye view of the ongoing activities in the European Statistical System (ESS) to advance towards the definition of a common methodological standard for MNO data in official statistics. Starting from the vision expressed in the recently published position paper by the ESS Task Force on MNO data (https://europa.eu/!KbdVG4) the talk will present two ongoing projects in the area, namely Multi-MNO (https://cros.ec.europa.eu/multi-mno-project) and the research project MNO-MINDS (https://cros.ec.europa.eu/mno-minds).

Combining mobile data and other sources: the French experiment

Marie-Pierre JOUBERT (French National Statistical Institute)

Mobile phone data is acknowledged for its role in enriching official statistics, revealing population dynamics across different times and days, benefiting health and safety services and policymakers. It also offers insights into daily movements by tracing user trajectories, shedding light on interregional interactions, behavioural shifts between weekdays and weekends, and the impact of telecommuting on mobility. However, limitations arise when using mobile data alone, as highlighted in various National Statistical Institutes publications. This presentation will explore the ongoing work of French statisticians, which integrate Mobile Network Operator data with traditional sources like census and administrative records, alongside innovative private sources such as credit card transaction data, to produce more comprehensive analysis.

The use of mobile phone data for tourism statistics

Marta SIXTO NEIRA (National Institute of Statistics, Spain)

Tourism is a very important industry in Spain. It represents 11.6% of the GDP. For this reason, measuring tourism is crucial in our country. We are conducting several surveys for the demand and the supply view. These surveys have high cost and low granularity. In recent years, we were trying to reduce cost and have more disaggregated data with other source of data. One of them is MNO data. We did a contract with the three main phones companies in Spain (representing approximately 80% of market share) and we receive aggregated data at low level of disaggregation. We have been publishing MNO data since April 2022 as experimental statistics, and we will continue to develop these data to introduce it in our official surveys.

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Enhancing official statistics: the role of Kido Dynamics and advanced mobility analytics from Mobile Network Operators data

Alberto Hernando DE CASTRO (KidoDynamics)

In this presentation, we examine the emerging role Kido Dynamics plays in enhancing the utility of official statistics through the application of sophisticated mobility analytics. By integrating proprietary algorithms with government and census datasets, Kido Dynamics offers a novel approach to understanding urban and rural mobility and demographic patterns. We will discuss the methodological advancements that allow for the extraction and analysis of high-resolution geolocation data from Mobile Network Operators, ensuring compliance with privacy standards and statistical rigor. Special attention will be given to the ways in which these analytics can be utilized by government bodies to refine census methods, improve public transportation planning, and optimize resource allocation. Case studies will illustrate how enhanced data granularity has led to more accurate demographic and socio-economic insights, facilitating more informed policy-making and contributing to the broader field of social science research. Attendees will gain insight into the challenges and opportunities presented by the integration of advanced data analytics in the enhancement of traditional census and governmental statistical practices.

10:50 – 11:15	BREAK
11:15 – 12:45	ROUNDTABLE

LIGHTNING TALKS

Alessandro ALASIA (Statistics Canada)

Lewis DIJKSTRA (EC-JRC)

Gabriel STEFANINI VICENTE (World Bank)

Esperanza MAGPANTAY (ITU)

OPEN DISCUSSION

Moderator: Alessandro ALASIA (Statistics Canada)

Closing and next steps

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INFORMATION
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THE OECD GEOSPATIAL LAB

This event is part of the OECD Centre for Entrepreneurship, SMEs, Regions and Cities activities.

The OECD Centre for Entrepreneurship, SMEs, Regions and Cities provides comparative statistics, analysis and capacity building for local and national actors to work together to unleash the potential of entrepreneurs and small and medium-sized enterprises, promote inclusive and sustainable regions and cities, boost local job creation, and support sound tourism policies. www.oecd.org/cfe

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