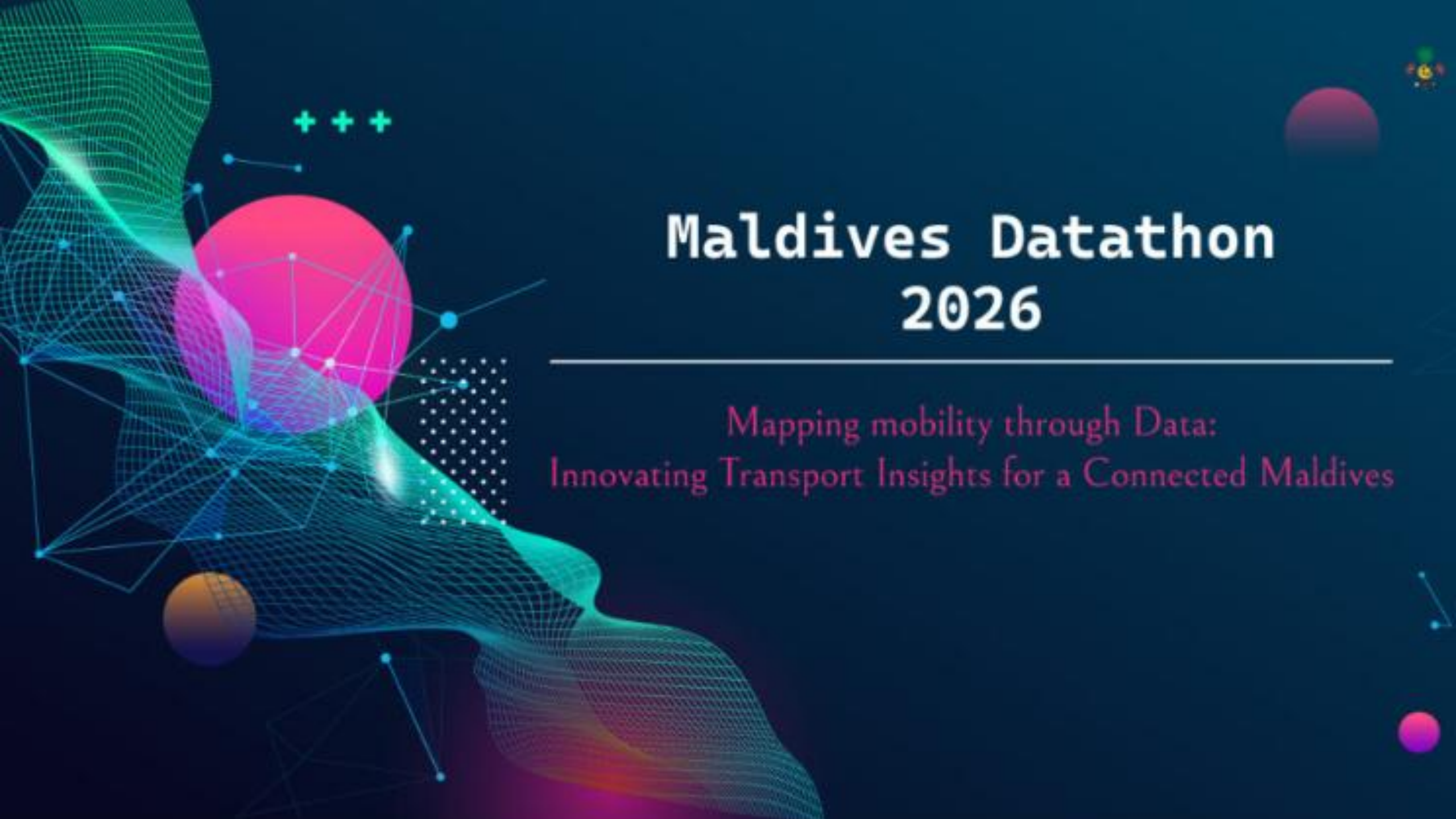

Maldives Datathon
2026
Mapping mobility through Data:
Innovating Transport Insights for a Connected Maldives

THEME:

Mapping mobility through Data: Innovating Transport Insights for a Connected Maldives















“The key objective of the Maldives Datathon 2026 is to develop and showcase data-driven, tech-enabled solutions that strengthen transport data systems through innovative methods, enhancing transport planning, monitoring, and sustainability.”







PURPOSE:

- Strengthening transport statistics through innovative ways by challenging participants to explore innovative solutions for improving the quality, accessibility, and utility of transport data.

- Efficient, sustainable, and inclusive transport systems rely on accurate, timely, and accessible data.

In the Greater Malé area transport related data is often fragmented, siloed, or outdated, limiting the ability of planners and decision makers to respond effectively to congestion, emissions, and infrastructure needs.

FOCUS OF THE EVENT



To promote the use of Official statistics in creating new ideas among the youth and new initiatives to support policy decisions



To foster collaboration between statisticians, geospatial experts, and technologists.



To move towards smart cities, sustainable transport, and climate resilience through timely data



To promote and accelerate ‘big data for statistics’ initiatives in Maldives



To promote the integration of GIS into national statistical systems.



To promote partnerships with research and technical community, by raising awareness on Official Statistics.



SCOPE

The scope includes, but is not limited to, the following areas:

- Leverage Earth Observation and satellite data to map and monitor transport infrastructure and activity.
- Utilize machine learning, AI, and computer vision to extract meaningful patterns from imagery and transport datasets.
- Study movement patterns across road, marine, and pedestrian transport systems.
- Track inter-island transport flows and analyze connectivity challenges.



SCOPE ....

- Integrate participatory mapping or mobile-based data collection tools to improve data richness.
- Use OpenStreetMap and other open data platforms to fill data gaps.
- Develop dashboards, interactive maps, or data portals to help policymakers visualize transport dynamics.
- Create accessible tools to support planning, investment, and emergency response.



SCOPE ....

- Model traffic flows, marine transport patterns to forecast demand or congestion.
- Suggest enhanced transport routes or interventions using historical and real-time data.
- Propose strategies to reduce the carbon footprint of urban mobility using data insights.
- Promoting innovation, creativity, and the use of open data in the statistical community.

Key indicators



Flight Movements: International Flights (2025)
34,786



Registered vehicles (2024)
16,153



Passenger movement at Velana international airport, 2025
2,699,225 (Arrivals)



Flight Movements: Domestic flights (2025)
214,237

Key indicators - SDGs



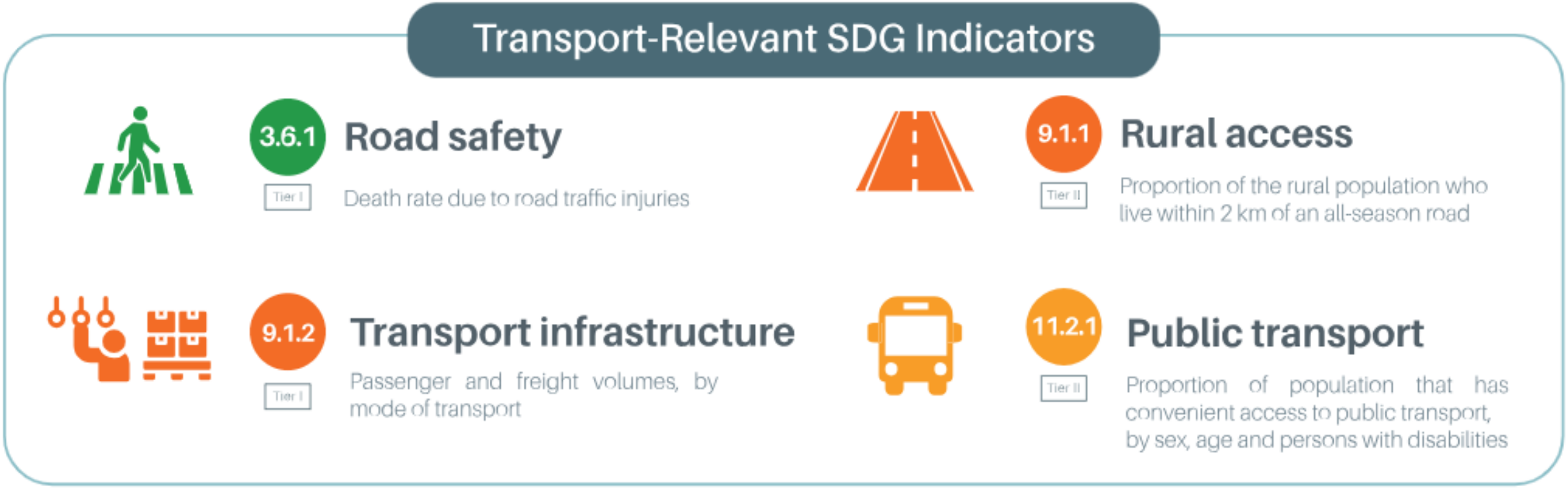
Sustainable and inclusive transport is crucial to the achievement of the Sustainable Development Goals.

Efficient and inclusive transport networks provide access to services, jobs and education, leaving no-one behind, regardless of their age, gender, or social status.

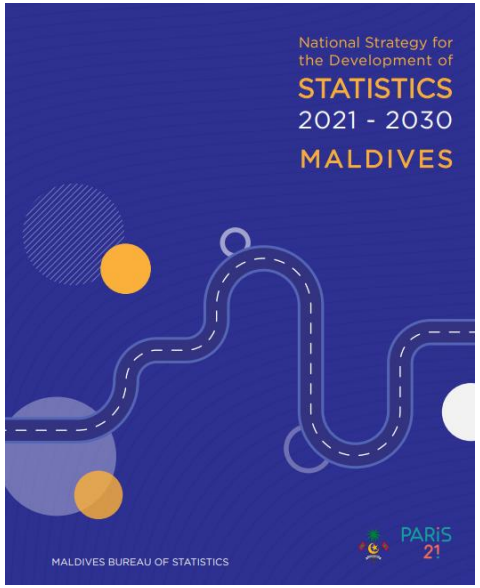


Direct Transport SDG Indicators

- The United Nations global indicator framework features several core indicators that directly measure transport-related progress:



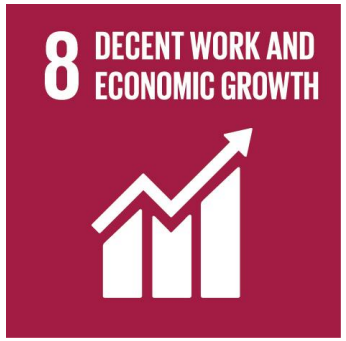
Broader Connections to national priorities and other SDGs



https://statisticsmaldives.gov.mv/mbs/wp-content/uploads/2021/11/NSDS-Maldives.pdf







Transport indirectly impacts and supports multiple other areas within the 2030 Agenda, including:

- **Affordable and Clean Energy (SDG 7):** Improving energy efficiency in transport and phasing out inefficient fossil fuel subsidies.
- **Climate Action (SDG 13):** Reducing greenhouse gas emissions from road, aviation, and maritime transport.
- **Decent Work and Economic Growth (SDG 8):** Connecting workers to jobs and facilitating efficient logistics and international trade. [1, 2, 3, 4]



Datasets as a guide:

Transport Data Sources from Maldives:

- Followme App

poll_id	imei	timestamp	device_date	latitude	longitude	speed	heading	network	cellid	gsm_level
8.6E+08	4E+14	8/1/2025 0:00	8/1/2025 0:00	4.17983	73.51031	0	0	1	60079	1
8.6E+08	3E+14	8/1/2025 0:00	8/1/2025 0:00	4.18692	73.49209	0.2	0	0	0	0
8.6E+08	9E+14	8/1/2025 0:00	8/1/2025 0:00	4.284311	73.42632	0	332	1	82181	31
8.6E+08	4E+14	8/1/2025 0:02	8/1/2025 0:00	4.22997	73.52589	6	149	1	32378	0

- Avas App
- Maldives Police Services Camera data
- MTCC Bus Passenger data
- MTCC Ferry Passenger data
- MACL Flight Passenger data
- MPL Vessel data
- Annual Statistical Yearbook Transport chapter



International Datasets as a guide:

Major Open Transport Data Sources

- Trade-and-Transport (TnT) Dataset UNCTAD Data Hub, https://unctadstat.unctad.org/datacentre/
- ICAO: Country-Pair Traffic, https://unstats.un.org/bigdata/task-teams/ttt-dashboards/icao-country-pair.cshtml
- Transport Data Commons (TDC): A global collaborative portal hosted by international organizations providing transport, mobility, and greenhouse gas emissions data across 120+ countries, covering public transit, rail, and road traffic.
- Data.Transportation.gov: The official public data portal for the U.S. Department of Transportation, offering massive datasets on aviation, railroads, public transit, maritime operations, and roadways.
- GitHub Open Transport Data Repository: A curated collection maintained by the University of Leeds listing high-quality open transport datasets, road safety statistics, and travel surveys.
- https://github.com/awesomedata/awesome-public-datasets#transportation
- **OpenStreetMap via Overpass API:** A crowdsourced global database providing rich spatial data on worldwide road networks, bicycle infrastructure, and public transit routes.



Research papers as a guide:

- OECD ; Big Data and Transport Understanding and assessing options

https://www.itf-oecd.org/sites/default/files/docs/15cpb_bigdata_0.pdf

- Big data for decision-making in public transport management: A comparison of different data sources Valeria Maria Urbano * , Marika Arena , Giovanni Azzone

https://www.sciencedirect.com/science/article/pii/S2210539525000136

- Analysing Transportation Data with Open Source Big Data Analytic Tools Y. Beeharry1*, T. P. Fowdur1 , V. Hurbungs2 , V. Bassoo1 , V. Ramnarain-Seetohul3

https://www.researchgate.net/publication/317368854_Analysing_Transportation_Data_with_Open_Source_Big_Data_Analytic_Tools

- Big Data in Transport Modelling and Planning, January 2021, Oksana Iliashenko, Victoria Iliashenko, Ekaterina Lukyanchenko

https://www.researchgate.net/publication/349744184_Big_Data_in_Transport_Modelling_and_Planning

Call to Action

“A connected nation starts with understanding how its people move. We need to deliver actionable insights that strengthen connections between our islands.

Data gives us the visibility; our solution gives policy makers and operators the leverage to act on it



Better Data, Better Lives!