

Harnessing Data for Urban Mobility Transformation

The TUMI Mobility Data Hub

The TUMI Mobility Data Hub is a comprehensive platform that brings together urban mobility data from over 2,000 resources across the globe in one place. It encourages cities and institutions to openly share their mobility data, thereby fostering data-driven strategies for sustainable mobility.

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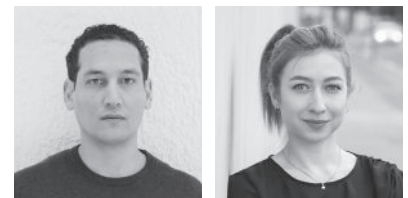
<https://hub.tumidata.org/>

TUMI invites input, comments,
and potential collaborations.





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With the Transformative Urban Mobility Initiative (TUMI), the German Federal Ministry for Economic Cooperation and Development (BMZ) is supporting climate-friendly, inclusive, safe and affordable Mobility in cities. TUMI is funded by BMZ and implemented by GIZ in collaboration with all TUMI partners.

-  www.transformative-mobility.org
-  @Tuminitiative
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The Critical Role of Data in Urban Mobility

Data, when effectively leveraged, advances sustainable urban mobility planning and implementation. It enhances service operations, tailors demand-driven offers, improves passenger load forecasts, and refines monitoring. It also supports city and mobility planning efforts like cycling infrastructure development and emissions calculations.

However, mobility data's potential is frequently underused due to poor data governance and prevalent siloed thinking. This leads to limited data sharing across departments and jurisdictions, hindering the utilization of data or cross-sector collaboration.

Introducing the TUMI Mobility Data Hub

TUMI's solution to these challenges lies in the creation of a Mobility Data Hub. Inspired by successful models of open data hubs in various cities globally, the hub is designed to efficiently collect, organize, and distribute data.

TUMI can support cities by equipping them with the necessary infrastructure and technical expertise to run data hubs efficiently. Offering the hub as a Software as a Service (SaaS) solution, cities can quickly set up their own data hubs. Additionally, the hub's interface can be customized and the maintenance supported through TUMI, enabling cities to concentrate resources on data collection and analysis.



An **Ecosystem**, not a One-Off Project

The TUMI Mobility Data Hub operates as an integrated ecosystem composed of four main components:



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01. The Core Software:

Built on the open-source software CKAN, the go-to solution for open data portals, the TUMI Mobility Data Hub guarantees compatibility with data portals from around the world.

02. Open Source Software as a Service (SaaS):

Cities or governmental organizations up to a regional or national level lacking a data hub can establish one with TUMI's support. Each city can have their unique own integrated instance within the data hub, allowing for direct data uploads and even autonomous management. When a city is ready to fully integrate the hub, the instance can be smoothly transferred to their own servers.

03. Centralized Repository for Mobility Data:

TUMI's Data Hub consolidates urban mobility data from over 2,000 resources on individual instances, turning dispersed city hubs into a single, searchable mobility data catalogue.

04. Adaptable and Replicable Data Applications:

TUMI is developing a range of applications that harness data from the hub through standardized interfaces. This allows the data to be processed, analyzed and visualized for specific use cases.

The following applications have been developed:



Accessibility/Transport Deserts App (Cuenca/Bogotá):

Identifies and targets transportation access gaps for more efficient transport planning.

Public Transport Service Quality Management App (Ciudad de Mexico/Metrobus):

Empowers decision-making with easy to comprehend data visualizations of the BRT system.



Bicycle Count Analysis App (São Paulo):

Supports enhanced cycling infrastructure by monitoring key routes and establishing comprehensive flow baselines.

Citizen Incident Reporting App (Cuenca/Bogotá):

Strengthens community engagement and data collection by enabling citizens to report mobility-related incidents.

Fuel-Price App (Global):

Provides a comprehensive overview of price dynamics for various fuel types across countries worldwide.