Case Study:

TfGM Developer Portal

Type: Website

Organisation(s): Transport for Greater Manchester

Tags: open data, standards, website, transport, in-house

Transport for Greater Manchester (TfGM) releases travel information open data through its [Developer Portal](#). The system is designed to provide developers with transport data from across the Greater Manchester region. TfGM also releases data through data.gov and other bespoke websites.

By making travel data more freely available, TfGM hopes to encourage the development of high-quality applications to help travellers feel better informed and make smarter choices.

The strategic drive behind open data focuses on how customers use TfGM's data to select journeys, products and services that best suit their needs. TfGM's ultimate vision is to make travel easier in Greater Manchester by providing accurate, reliable and easy to understand travel information.

Background

[Transport for Greater Manchester](#) (TfGM) is the public body responsible for co-ordinating the transport network and services across Greater Manchester. TfGM makes much of its transport data open through the [TfGM Developer Portal](#). This is a data platform that external developers can connect to, allowing them to provide a range of web data, mobile app data services and other reports.

Key observations

1. **TfGM is committed to travel information open data** and sees numerous benefits from this approach. Allowing data to be incorporated into third party products ultimately improves the quality and availability of travel information for customers and provides insights that can help planning and driving innovation in GM. Other organisations that have benefited from this approach include TfL who have noted various financial benefits and New South Wales who were able to drive innovation through releasing the weight of trams as open data, which was converted into crowding information by the community

of users. Other local authorities across the UK are also adopting an open data approach.

2. **TfGM currently have an open portal and publish a range of datasets including** Metrolink real time data, incidents and accidents data, car park locations and capacity information and traffic signal locations and flow information. We also publish static datasets on data.gov including public transport schedules, Metrolink fares table, bus stopping points and cycle route maps.

3. **TfGM is currently creating more open data feeds**, first testing and using internally, such as real-time bus and Metrolink information and service timetables.

Strategic drive

The strategic drive behind open data is part of Greater Manchester's broader vision to make travel easier in the region. To achieve this vision, TfGM aims to provide accurate, reliable and easy to understand travel information to the residents, businesses and visitors of Greater Manchester. This facilitates customers to make informed choices and get the most out of Greater Manchester's transport network.

The ability of customers to make informed travel choices is likely to have wider economic benefits for the city-region, as illustrated by the success of open transport data in London. Research by Deloitte indicated that open transport data released by TfL generates [economic benefits of up to £130 million per year](#) for the London economy. Whilst financial gains in Greater Manchester are unlikely to reach this scale, effective open transport data still has the potential to significantly boost the local economy.

TfGM is looking to improve the customer experience and add value through open data, with a key focus on **scalability** and **resilience,** while adding data to the offer. By focussing on scalability, TfGM will be better equipped to handle peaks and dips in demand for data. At the same time, a focus on resilience will better equip the open data site to continue functioning even when there is a failure of downstream system components.

Currently, some of the foundation work for opening-up new datasets is taking place internally and is not yet live. This reflects the idea that opening data is the final, and arguably relatively simple, step along the broader path to open data. Earlier stages, such as collaborating with others to identify possible new datasets with potential value and ensuring that back-end data are in the right format and quality, are essential and arguably more demanding parts of the process.

Key partners and projects

TfGM places a high value on its relationships with key partners and other major transport providers and invests time and effort in building and maintaining these strong relationships. These relationships make it easier to obtain and share data between key partners. For example, TfGM works with third-party information providers, sharing data with them, to ultimately allow customers to get the most up-to-date, accurate and reliable information, through whichever channel they choose. TfGM actively promotes several third-party information providers that they work with on the [TfGM website](.).

TfGM is currently working on a number of new open data projects and ambitions internally. Their focus is on identifying what third party organisations are already doing, then identifying the existing gaps where they can add value.

One particularly significant relationship is with [Transport for the North (TfN)](.). In particular, collaboration between TfGM, TfN and other northern transport authorities has led to the launch of a new TfN disruption information tool that allows transport disruption information to be published as open data in a consistent format. This standardised open data streamlines the information presented to third-party applications, which means it can be shared with customers more rapidly and accurately than ever before.

Another key project is ongoing through collaboration with the bus operators, whose data is supplied to TfGM by [Vix](.) and [Ticketer](.). Through this work, TfGM is hoping to soon publish real-time bus departure information This work will align with DfT's Bus Open Data project which will provide customers with live information on bus routes, timetables and fares at their fingertips.

Important considerations

Content and quality

TfGM's current developer portal contains a set of APIs covering datasets on Metrolink, venue events, incidents or accidents, car parks and traffic signals. Detailed metadata for each dataset is available as an EDMX document.

In addition to releasing data on the Developer Portal, TfGM releases some of its data through [data.gov.uk](.). For example, they recently released [Metrolink fares](.) on data.gov.uk to allow developers to integrate the cost of journeys into their platform.

Timetables, real-time information and disruption information have been identified as the most strategically important datasets through customer research. However, Covid-19 has highlighted the importance of some additional datasets, including public transport capacity information. This type of customer research is being used to prioritise work at TfGM.

Usage data

TfGM undertakes limited analysis of the usage statistics on its Developer Portal at present. However, the existing portal does provide a number of metrics and analysis tools. In general, the highest usage of the APIs at present actually come from TfGM's own applications, such as the official Metrolink app. The most frequently requested data across all consumers is for real-time tram data, receiving millions of requests per month.

What can Greater Manchester take from this now?

- It is important to work with partners and stakeholders to identify and understand the existing data provision – this is essential in order to identify gaps in provision where value could be added, to avoid unnecessary duplication of effort and bring the most benefit to customers.
- A strategic focus on the end consumer and the needs of the potential user base should help to prioritise what data needs to be opened and what value could be added by open data.
- A strong focus on maintaining high internal data quality and robust internal data management processes will ensure that datasets shared openly will remain high quality, consistent and up to date. Ensuring high data usability is likely to encourage higher data usage.
- Having a fully integrated open transport data system has significant potential for boosting the local economy.
- Opening the data itself is the final technical step along the road to establishing good quality open data architecture, and is relatively simple. Earlier stages, such as ensuring back-end data are in the right format and quality, and setting data publication procedures, are arguably more essential and more demanding parts of the process.

Find out more:

[TfGM Developer Portal](#)

[TfGM Developer Portal News – Release of data aims to improve traffic signals in Greater Manchester](#)

[TfGM Developer Portal News – How to access the API](#)