

# Strava Metro Data as an Urban Planning Input: Seizing Opportunities and Managing Limitations

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## ABSTRACT

The fitness platform Strava gathers data from its users that the company repackages and shares through its Strava Metro platform. Municipalities have been using these data to inform their active transportation planning efforts, but less is known about how they use these data and account for their limits. Through interviews with municipal staff who are long-standing Metro users, this paper examines how decision-makers use these data and mitigate for their limitations. It concludes with reflections on the role of third-party data in urban planning efforts and their impact on planning outcomes.

## KEYWORDS

Platform Urbanism, Smart Cities, Governance, Active Transportation, Big Data, Urban Planning

## INTRODUCTION

Urban planners work within a rapidly changing urban landscape, particularly with respect to data collection methods and analysis. Decision-making processes and policy development, once reliant on data procured in-house, is now facilitated by access to near real-time data flows (Kitchin, 2023; Leszczynski, 2020; Scassa et al., 2022). These new data sources are derived from many different technologies that collect and share data through the use of digital platforms. Some of these platforms are paid products, expressly focused on meeting the needs of planners or consultants, while others are directed towards use by the general public with parallel or ancillary products that can be adapted to planning purposes. In this way, third parties are intervening in—and disrupting—the traditional data-gathering methods of urban planners (Johnson & Scassa, 2023).

Platform data is an entry point for private sector impact within municipal planning (Barns, 2018). The use of these data represents a shift from city governments collecting their own data to support decision-making or service provision to supplementation via outside sources. Part of this shift comes from city government requiring expertise that may not be available in-house (Dirsehan & van Zoonen, 2022; Johnson & Sieber, 2012). Additionally, the speed with which the private sector

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is able to develop new data sources and leverage mobile technologies and digital service provision outpaces the apparatus of municipal decision-making. Consequently, the platformization of data within municipal government leaves urban planners asking crucial questions related to access to data, duplication of data collection efforts, and the cost of paid-access models.

One unique platform operating within this space is Strava Metro. Strava Metro is the by-product of the Strava application, an exercise tracking platform with over 100 million users (Strava, 2024). Strava is built around encouraging users to track their workouts (whether running, cycling, or a myriad of other activities) and to compete with each other on individual road, trail, or track segments. The by-product of this main user experience is the Strava Metro dashboard and data set, which is provided at no cost to municipal governments to augment active transit planning. This data set has established applications within transit planning (Alattar et al., 2021; Milne & Watling, 2019) and, more specifically, active transit planning (Lee & Sener, 2020; Robinson et al., 2024).

This research presents first-hand accounts of professional planners that have navigated the adoption and use of Strava Metro data and the implications of their experience for the adoption of platform data in general. We also focus on how municipal governments have managed the blending of Strava data with other data sets, revealing how Strava data has supported decision-making within the specific area of active transit and broader transportation planning. Finally, we present user perspectives on the challenges and opportunities associated with the use of Strava Metro data.

The findings of this research signal that municipal staff see opportunities in the use of Strava Metro data, particularly with respect to tangible outcomes such as the development of new active transportation infrastructure and a greater presence of active transportation concerns within the planning process. We found that municipal staff had a robust understanding of the strengths and limitations of the Strava Metro data set and took active effort to use it carefully and within appropriate contexts. We conclude with critical reflections about the role of third-party platform data as a decision-making support within municipal government, highlighting concerns to guide both applied practice and further research.

## **BACKGROUND: THE CHALLENGES MUNICIPAL STAFF FACE WORKING WITH THIRD-PARTY DATA**

The path to adoption of new technologies within government is often a challenging one. Drawing from Rogers's (2010) diffusion of innovations, a variety of internal and external factors influence the process of government adoption of technology, such as industrial or societal trends, the opportunity to improve efficiency or efficacy of decision-making or program delivery (Johnson & Sieber, 2012; Jun & Weare, 2011), and also the desire of a government to be more innovative (Johnson & Robinson, 2014; Zuiderwijk et al., 2014). Simultaneously, organizational challenges, such as resistance to change, financial constraints, legal or policy hurdles, and a mismatch with operational requirements (Janssen et al., 2012), can impact government adoption of technology. In accepting external sources of data, previous research indicates that governments face questions of capacity, quality, long-term implications, licensing, and conceptual issues around developing a reliance on third parties for the provision of key government data sets (Johnson & Scassa, 2023).

Governments have a long history as collectors of data and in the procurement of external data sources to support decision-making. One of the most recent changes in how governments obtain and share data was driven by the mid-2000s development of government open data—that is, data collected or owned by government that is made publicly available with only minimal licensing requirements (Attard et al., 2015; Höchtl et al., 2014). Open data is an attempt to meet transparency goals, making the workings of government more open to the general public, and is also an exercise in efficiency, allowing for easier sharing of data across and within organizations, breaking departmental silos that add complexity and cost to government operations (Janssen & Zuiderwijk, 2014).

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