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Planning for platform urbanism

Subina Shrestha

University of Manchester, UK

Corresponding author: subina.shrestha@manchester.ac.uk

As urban areas become increasingly digitally mediated via smart technologies and app-based services, urban planners find themselves navigating newer infrastructural, spatial, and governance challenges brought about by digitalization. Adding to this set of challenges is the meteoric rise in e-commerce and app-based digital platforms, i.e., the platform economy. The platform economy has profound socio-spatial impacts, which are particularly felt in food delivery work as the urban streets are transformed into workplace. How might planners overcome the challenges and impacts posed by the normalisation of just-in-time deliveries and platform-mediated gig work? In this commentary, I highlight the dominance of a piecemeal approach to food delivery work – using examples from transport and climate planning in Canadian cities – which makes delivery workers subject to different layers of precarity. Following this, I show where and how planning might intervene and argue for concerted efforts in anticipatory urban planning that (i) bridges the work/non-work dichotomy prevalent in contemporary planning processes and, (ii) meaningfully engages with mobile logistical workers towards creating inclusive cities. Planning for platform urbanism, thus, requires urban planners to learn from policy levers that have worked in different sectors and adapt them to a still-unfolding complex ecosystem of platform-based urban service provision.

Keywords: urban logistics, platform, gig-work, transport planning, climate planning

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Platform Urbanism and Urban Planning

As urban areas become digitally mediated – through smart technologies and app-based services – urban planners find themselves navigating newer infrastructural, spatial, and governance challenges brought about by digitalization. Adding to this set of challenges is the meteoric rise in e-commerce and app-based digital platforms, i.e., the platform economy, particularly within food delivery. As food delivery service via different apps (eg., Foodora, UberEats, Deliveroo, etc.) becomes the norm, there are spatial, social, and regulatory consequences (Fields et al., 2020; Graham, 2020).

Consider how a typical meal delivery is made: as you place an order on Foodora and track it, a delivery worker, most likely carrying a thermally insulated pink delivery backpack with Foodora's logo on a (e-)bike, pedals across urban streets – bike lanes, major roads and sidewalks – as fast as possible to deliver your order to your doorstep. As such, platforms get further enmeshed into everyday urban life and increasingly influence the organization of urban space, urban infrastructure and labor relations – a distinct phenomenon referred to as platform urbanism (Fields et al., 2020).

Typically, the movement of goods and services has been the domain of the private sector and state-led urban planning has traditionally focused on passenger mobility (Haarstad et al., 2023; Rodrigue, 2006). From a planning perspective, however, platform urbanism has profound spatial and social impacts. First, it shifts consumption from fixed locations such as grocery stores and dine-in restaurants to distributed networks reliant on logistics hubs, courier fleets, and consumer and worker data. It also places additional infrastructural demands not formally accounted for in city planning, such as (e-)bikes, scooters, as well as consumer data (Farhangi et al., 2025). Second, it creates conditions of labor precarity via algorithmically managed, platform-mediated and sub-contracted work, i.e., gig-work. As gig-work in food delivery is racialized, it also has profound implications for social (re)production and (in)equity (Altenried, 2019). Yet, urban planning efforts are still concentrated around regulating the built infrastructure (Graham, 2020) rather than on the social impacts and experiences of these new technologies and services (van der Graaf & Ballon, 2019). This partly stems from urban planning's tendency to maintain the binary of work/non-work and thus not engage meaningfully with issues of labor rights and agency (Hayashi, 2023). However, platform urbanism converts urban streets into workplaces (Geschwindt, 2022), as mobile workers maneuver through roads and pavements to make the just-in-time delivery on (e-) bikes, (e-) scooters, etc. Urban streets, understood this way, challenge the work/non-work binary that planning upholds; it also highlights the (un)intended consequences of planning decisions for delivery workers.

Planning for cities that are smart, socially inclusive and livable requires that city authorities use anticipatory urban planning that “stimulates workplace politics to engage with extra-workplace realms of urban society” (Hayashi, 2023, p. 424) and tackle digitalization, labor precarity, and social justice together. In this commentary, I highlight how a piecemeal approach to food delivery work in Canada – using examples from transport and climate planning – makes delivery workers subject to different layers of precarity. Following this, I argue for concerted efforts in anticipatory urban planning that meaningfully engages with mobile logistical workers towards inclusive cities.

Gig-work, Labor precarity and Piecemeal policies

Platform based gig-work is routinely hailed as a flexible form of work that gives workers autonomy and flexibility over their work. In the case of mobile platform work, food delivery workers recognize this autonomy and appreciate the freedom of their work (Kervola et al., 2024). Apps such as Deliveroo, Foodora, DoorDash, Uber Eats, to name a few, are flourishing

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globally and in Canada. In Canada, the revenue from online food delivery market is projected to reach USD 28.6 billion by 2030.¹

Yet, precarity continues to underpin this gig economy. Much has been written, in academia as well as in media about the public debate on precarious work and the quality of jobs. Delivery workers are typically not considered salaried employees but rather operate as independent contractors or self-employed and are incredibly difficult to unionize. By repressing unionization, workers are unable to organize and bargain collectively while companies can forego basic labor rights such as workplace protections, minimum wage or sick pay. Platforms are thus able to relinquish accountability and carry out the exploitation, extraction, and extreme commodification of labor (Bauriedl & Strüver, 2020; Chiappini, 2020; Vadiati et al., 2025). As algorithms assign work and reward speed and efficiency, delivery workers are held to impossible standards of fast ‘just-in-time’ deliveries and ‘bullet-speed deliveries’ that encourage and reward risks – ranging from speeding to modifying vehicles to overlooking safety concerns to committing “acceptable” traffic offenses – for barely minimum wage (Chang & Behrendt, 2025). This is further compounded by firms’ tendency to use AI to assign transport routes, set time windows and use dynamic pricing, which has been shown to normalize dangerous yet fast-driving behaviors among riders (Cugurullo, 2025). Platforms thus evade accountability while simultaneously surveilling workers and curtailing their workplace safeguards.

Delivery workers across the world have resisted against platforms in response: they have organized protests but also filed lawsuits against such platforms, fighting for decent work conditions, minimum pay as well as the right to unionize. In Canada, regulating food delivery platforms is typically considered the role of province rather than cities as it is outside municipal licensing and control. Thus, provinces are responsible for setting standards for occupational health and safety alongside minimum wages, which municipalities have to adopt. Within the platform economy, continued advocacy and organizing has had a positive impact at least in two provinces here: provincial legislations in Ontario and British Columbia have begun to recognize the protection needed for gig-workers. Ontario’s Digital Platform Workers’ Rights Act, 2022 and BC’s amendments to both its Employment Standards Act (the “BC ESA”) and Workers Compensation Act (the “BC WSA”) both establish a minimum wage for platform workers - \$17.20 per hour in Ontario and \$20.88 in BC. In July 2025, Uber (including UberEats) drivers in British Columbia became the first platform workers in Canada to formally unionize (Sioufi & Ivanova, 2025).

Despite workplace progress, there is yet to be a substantive engagement with delivery platform workers outside of labor contexts. Employee protection and minimum pay are important forward-looking legislations. However, they are not sufficient - delivery workers’ precarity is compounded by planning decisions which de-prioritize bike lanes and have resorted to a targeted crackdown on (e-) bikes and bikelanes. Similarly, urban climate planning is yet to explicitly consider delivery workers as vulnerable to urban heat stress, which inhibits workers’ ability to mitigate heat-related risks.

Transport Planning: Delivery work and unsafe infrastructure

A food delivery rider is highly visible in the city – it is hard to miss a rider carrying a thermally insulated box hailing a regular or an electric bike pedaling through the main road, bike lane or sidewalk. In other words, the city streets are essentially the riders’ workplace. Yet, globally, there is a rising ‘bikelash’ campaign, where the allocation of street space to bicycles is vehemently opposed. The two-wheeler and related infrastructure projects have been subjects of much contention in policy and media from New York to Toronto, London, Sydney and Auckland (Wild et al., 2018), with the overall rhetoric of bike lanes causing traffic congestion

¹ <https://www.deliverect.com/en-ae/blog/trending/state-of-the-food-delivery-industry-canada-2025>

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and taking space from cars. This hostility towards cycles is so entrenched that car drivers dehumanize cyclists and are deliberately aggressive towards them (Delbosc et al., 2019).

That bikes contribute to traffic congestion is highly disputed – studies have shown that bikes have a “positive effect on reducing rush-hour congestion” (Wang & Zhou, 2017, p. 1). However, there is a growing proportion of the general public who express safety concerns over (e-) bikes, considering them inherently ‘dangerous and irresponsible’ (Fincham, 2007), as well as a threat to pedestrians (Wild et al., 2018). As such, regulations over policing of e-bikes are becoming stricter in North America and Europe – there are speed limits, fines for non-compliance (Fishman & Cherry, 2016) – all of which are to be borne by the rider, not the platform. In some cases, the combination of citizens’ growing road safety concerns and the portrayal of delivery workers as ‘bad cyclists’ has led to police forces using bike checks to verify the immigration status of riders; if any irregularities are found, riders are referred to immigration enforcement (Sigona et al., 2025). Bikelash thus reinforces dangerous structural conditions that delivery workers are disproportionately harmed by.

In the case of Ontario, the province has doubled down on its attempts to remove bike lanes, particularly in Toronto. Months of biking advocacy and legal battles later, the court deemed the removal of bike lanes as unconstitutional. This exemplifies how community advocacy has the potential to create inclusionary citizenship at local levels by creating safer bicycling road conditions for delivery workers and other bicyclists. The province has appealed this decision, and at the time of writing, the legal battle is still being drawn out. Similarly, in Vancouver, BC, although the cycling network has improved over the years, a city-report acknowledges that critical gaps remain still, in areas where bike lanes are not fully-traffic separated and share space on roads with high traffic volumes and speed limits (Lau, 2024).

Both these instances show how urban transport planning is yet to substantially engage with gig-workers, who do not freely choose biking as a form of commute or leisure – biking is labor (Geschwindt, 2022). Bikelash is thus directly at odds with enshrining safety for delivery workers - workplace safety is not just limited to decent work conditions, sick days etc. but fundamentally also about safety while on-the-road.

As authorities are unwilling to regulate platforms or hold them accountable but are placing strict(er) regulations on e-bikes and doubling down on biking infrastructure, delivery workers face a lose-lose situation. Not only are they exploited by the platform, but authorities are complicit in facilitating dangerous working conditions by instigating bikelash.

Climate Planning: Workers’ health and extreme heat

Food delivery workers represent vulnerable workers – exploited by platforms, stigmatized by public, policed by authorities. An additional layer of vulnerability is now emerging through the frequency of extreme heat events, coupled with inadequate safe working conditions. Research has shown that consumers are more prone to ordering food online in times of urban heat extremes (Zhang et al., 2025). Food delivery workers thus work intensively during peak hours – when the heat exposure is the most severe – and get minimal rest (Jiang et al., 2024). Platforms incentivize deliveries during extreme heat – a phenomenon known as surge pricing. Thus, workers are willing to work more in extreme weather conditions to earn more money. Studies have, however, shown that workers’ hourly wages increase only marginally compared to the increase in their workload (Ge et al., 2024). As such, workers are at a higher risk of extreme heat-related health impacts with little to no compensation.

In Canada, worker protections against heat are fragmented, reactive and unevenly distributed across provinces (Thorburn, 2025). In Ontario, the Heat Stress Bill, 2025 proposed the development and implementation of a Worker Heat Protection Standard. The Standard, if adopted, would require employers to ensure mechanisms and protocols are in place to shield employees from exposure to heat stress, including but not limited to personal protective equipment, access to cool drinking water and breaks at the employer’s expense. However,

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the bill has yet to specifically address protection gaps for gig-workers (Thorburn, 2025). At the time of writing, the bill has yet to be passed and as such, platforms are not mandated to ensure heat stress protection or compensation to workers.

The intersection of extreme heat with already precarious work conditions highlights the urgent need to address the intersecting vulnerabilities experienced by food delivery workers. As Canadian cities experience more frequent and intense heat stresses, their heat response plans have typically focused on access to cooling centres, heat relief facilities, public outreach, misting stations, drinking water fountains etc. (Simpson et al., 2026). These are important interventions, but inadequate. Interventions that promote cooling by influencing the microclimate, i.e., increasing street tree canopy, shading in waiting areas as well as publicly accessible green and blue infrastructure that allow workers to mitigate heat stress without losing their income are important. Furthermore, any adaptation strategy cities recommend must not further exacerbate working conditions for mobile logistical workers and push them into heat stress.

Any urban planning instrument (be it regulatory, fiscal, programmatic, etc.) that does not consider gig-workers risks inadvertently rendering them more vulnerable and compounding urban inequalities. Thus, policymakers who advocate for decent work - at the municipal level or the provincial level - must acknowledge their evolving responsibility in ensuring that delivery workers not only make a living wage, but also ensuring the street becomes a safe workplace. Conversely, urban planners who advocate socially inclusive and livable cities must engage meaningfully with gig-workers as they are not just workers, but also dwellers of urban space who are both subject to and reproduce the temporal and spatial orderings of the city.

Moving forward: An anticipatory planning approach

Platform urbanism is reshaping the expectations of policy – it is about enshrining workplace safeguards into the platform economy, but also reassessing what infrastructure is needed outside of labor regulations to ensure that delivery work is indeed safe and socially just. Collective organizing, in this regard, is necessary. In both BC and in Ontario, collective organizing from different labor coalitions have shown positive results for worker classification and decent pay, whereas Uber drivers in Victoria, BC successfully unionized. Another possible step is worker-owned platforms. In Europe, CoopCycle, a federation of bike delivery co-operatives with dozens of affiliated members, has been advocating its model in the platform economy. Montreal-based Radish, a platform co-operative in the food-delivery sector, is one such example in Canada (Shrestha, 2026).

Whilst labor protection and decent work are important, as I have pointed out, mobile work is not just about work. In addition to reconfiguring work conditions, it is also altering the built environment and the human condition (outside of work). Upholding the work/non-work binary is not useful here – the spatial and social ramifications of gig-work are felt on the urban streets. Therefore, at the bare minimum, there is a need for urban planners to step up and to anticipate and mitigate the (un)intended consequences of planning decisions for delivery workers. This calls for an anticipatory planning approach.

Anticipatory transport planning that considers gig-work entails proactive regulations about speed-limits, clear language on what comprises an e-scooter, e-bike, motorbike, etc. as well as where they can be used, programs for road safety for delivery workers as well as expansion of safe infrastructure for biking to accommodate for a growing number of delivery workers. Particularly important here would be public dissemination about fire hazards from e-bike batteries as well as solutions such as battery swapping, which some Canadian cities are already piloting (Chung, 2026). Similarly, climate planning with consideration of gig-work entails ensuring that bike paths are shaded, cooling centers and public blue-green spaces are readily accessible and information about heat risk and relief is readily available in several languages. Finally, if urban planning is to be truly inclusive, then it matters a great deal that

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the experiences of mobile logistical workers inform planning decisions. Here, labor-community mobilization can go great ways to support worker solidarity as well as craft worker identities within their communities – to inform inclusive and equitable planning. In Toronto, this is already evident in the combined work of Cycle Toronto, the Biking Lawyer and Toronto Bike Brigade who organized multiple sessions on safe cycling for bike delivery riders in spring 2026, where riders shared their experiences and concerns (Shellnutt, 2026). While I have pointed to two specific aspects within urban planning – transport and climate – there are other dimensions of planning (such as land-use planning and zoning, infrastructure investments etc) that merit further attention too. Planning for platform urbanism with an awareness of socio-spatial impacts, then, is about strengthening the social infrastructure, including but not limited to social connections and networks, accessible public spaces, trusted advice and reliable information, etc., (see Horton & Penny, 2023; Latham & Layton, 2022; Prytherch, 2022) that delivery workers rely on – further research on which is needed.

Planning for platform urbanism is messy, complex and riddled with uncertainties. Yet, given how platforms are reconfiguring work, space, infrastructures and social relations, it is imminent that urban planners engage with mobile logistical work pre-emptively and substantially. Planners thus need to learn from policy levers that have worked in different sectors and adapt them to a still-unfolding complex ecosystem of platform-based service provision.

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Declaration on the Use of Artificial Intelligence (AI)

The author(s) declare that no generative artificial intelligence (AI) or AI-assisted tools were used in the preparation, writing or editing of this manuscript. The intellectual and scholarly content of the work was entirely produced by the author.

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