Adaptive governance, hybrid temporary urbanism, and outdoor spaces: Post-pandemic legacies in New York and Toronto

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Abstract

This paper reflects on the development and evolution of hybrid forms of temporary urbanism, as well as the post-pandemic legacies of adaptive governance. Informed by 34 interviews with municipal, community, and business association leaders, it contributes to debates about emergency urbanism and the politics and governance of public health associated with the adaptation of streets and sidewalks in New York City and Toronto. We find that the initial, reactive adaptations of outdoor spaces occurred because of a hybrid form of adaptive governance, favoring both bottom-up and top-down collaborations between weakened governments and strong, established community organizations. In examining the legacy of such initiatives, we demonstrate that rapid, adaptive governance was not sustained. In conclusion, the paper examines how government agencies can better prepare for future crises. We suggest that the most important elements are not the specific plans for an inherently uncertain future, but rather the ability to mobilize diverse and flexible resources and, more importantly, to address lock-ins through a combination of agile strategies that display both strong and weak forms of governance. This, in turn, requires trust and a more devolved, place-based distribution of power in urban-making.

Keywords:
adaptive governance, temporary urbanism, post-pandemic cities, outdoor spaces

Introduction

Cities are understood to have evolved and transformed over time in response to numerous and often accumulated challenges and so-called crises. Such crises can be understood as opportunities or periods of transition due to their ability to favor innovative adaptations (Frankopan, 2024). The COVID-19 pandemic was different, however, as it originated from an unprecedented health shock and had lingering impacts, specifically regarding economic and social damages and the paths taken toward reaching a new normal (Nolte and Lindenmeier, 2024). During the first phase of lockdowns, urban studies scholars engaged in numerous rather optimistic pieces (see Connolly and Kythreotis, 2025), reflecting on the hypothetically transformative impact of the pandemic. More thorough, critical pieces later emerged, developing more skeptical arguments about the pandemic's transformative impact (Berglund et al., 2023; Grove et al., 2022; Latanville and Mitra, 2025; Connolly and Kythreotis, 2025). In their review paper, Connolly and Kythreotis (2025) question the governance innovations that emerged from what McGuirk et al. (2021) name "emergency urbanism," specifically with regard to other challenges like climate change and biodiversity loss. They conclude that cities are neither "Building Back Better" nor learning from the pandemic to address other crises. Similarly, with a focus on transportation policymaking, Latanville and Mitra (2025) examined the conditions that enabled policy change during the pandemic in the Greater Toronto and

Hamilton Area, the Metro Montreal region, and the Metro Vancouver area. While not engaging with the legacy of those transformations, they call for more research on pandemic-time street reallocations with a view to creating healthy, sustainable, and equitable communities.

This paper situates itself in this field, critically reflecting on the transformative (or not) nature of the COVID-19 pandemic with a focus on policy, decision-making, and governance. It contributes to ongoing debates about emergency urbanism (McGuirk et al., 2021) and the politics and governance of public health and infectious disease (Keil, 2024). While many insights draw upon secondary data review or data collected solely during the pandemic, our reflections rest on interviews conducted over an extended post-pandemic timeframe (February 2022 to May 2024). We engage with these debates by focusing on the legacy of transformative pandemic adaptations and examine how adaptive responses can differ and evolve from being introduced as reactive, emergency processes toward longer-term transformations. To do so, we situate the concept of adaptive governance in its application to new forms of temporary urbanism (Andres, 2025, Andres et al., 2021; Stevens et al., 2024; Stevens and Dovey, 2022), two concepts that we define next.

Adaptive governance (Garmestani & Benson, 2013) refers to how governance mechanisms and strategies are adapted to allow prompt, reactive measures while encouraging both social and economic resilience (Maurya & Rathore, 2023). Governance agility is key to accounting for complexity and volatility (Greve et al., 2020). A growing literature on the changing governance arrangements associated with COVID-19 in cities (see Marvin et al. (2023) for a review) includes work on the weakened capacity of urban governments to deal with pandemics because of the legacies of austerity (Mould et al., 2022; Inverardi-Ferri and Brown, 2022), including the erosion of public services and the pre-pandemic rise in socioeconomic inequality. Path-dependent lock-ins mean that adaptive governance was framed around an imperative to innovate, as governments lacked the capabilities and agility to tackle complex urban challenges (Marvin et al., 2023; McGuirk et al., 2022). This paper follows these debates but complements recent insights by adopting a spatialized and localized approach, with a focus on cities and outdoor space adaptations.

Our interest in collaborative governance converges with a critical analysis of how temporary urbanism evolved during and post-pandemic (Andres, 2025, Stevens et al., 2024; Stevens and Dovey, 2022). We define temporary urbanism as processes, practices, and policies of and for spatial adaptability that enable non-permanent transformation and spatial change as well as the creation of livable spaces (Andres and Kraftl, 2021). In the context of COVID-19, temporary urbanism manifested through hybrid strategies involving both local communities and regulatory bodies (Andres, 2025). In this paper, we examine new forms and politics of experimentation through agile, reactive responses that led to the temporary transformation of outdoor spaces (streets and sidewalks), influenced by tactical techniques (Lydon and Garcia, 2015). These health-led and emergency initiatives were part of a wider process of urban adaptability and were, in part, sustained post-pandemic.

This paper thus aims to answer the following questions: How did hybrid temporary urbanism transition post-pandemic? What are the legacies of adaptive governance? We address them through a comparative case study of two cities, New York City (NYC) and Toronto. The cases are based on an examination of the governance of their (initially temporary) repurposing of streets and sidewalks and the introduction or expansion of open restaurants/dining and open

streets programs. In NYC, the outdoor dining program was initially referred to by the city government as the Open Restaurants (OR) program and, after being made permanent in February 2024, as "Dining Out NYC." In Toronto, a similar program is called CafeTO. In NYC, the initiative, led by the Department of Transportation (DOT), allowed the development of temporary outdoor roofed structures—some fully enclosed and equipped with electrical installations and gas-only heating devices; it initially operated year-round before being made permanent as a seasonal program. In Toronto, in partnership with the city's economic development office and local business associations, CafeTO enabled restaurants to remain open for outdoor dining, even when indoor dining was not permitted due to emergency lockdown rules. Unlike in NYC, Toronto patios involved limited urban design adjustments and built structures (such as movable furniture and barriers). Similarly, COVID-19 shutdowns and demands for access to public space and safe outdoor opportunities led both cities to adapt the use of streets. NYC used the Open Streets (OS) program to expand the use of temporary street closures, which were either seasonal or year-round, and implemented either Friday through Sunday or all week. Toronto introduced programmes including ActiveTO and SlowStreetsTO to make space for pedestrians and cyclists. These programs operated seasonally, and some have continued post-pandemic.

The remainder of the paper is structured as follows. In the next section, we frame our understanding of temporary adaptations and adaptive governance. After presenting our methodology, our empirical analysis looks at the governance mechanisms behind Open Restaurants, Open Streets, CafeTO, and ActiveTO programs through the lens of adaptive governance. We examine the hybrid mechanisms that brought community organizations and governments together in an effort to support temporary outdoor public space adaptations, as well as the legacy of these initiatives. The paper concludes with a discussion about the ongoing implications for urban adaptability, adaptive governance, and the capacity to respond to future crises.

Temporary adaptations and adaptive governance during and post-pandemic

Urban adaptations in times of crisis manifest as processes, practices, and mechanisms that change how people live in cities and how urban public spaces are used. Temporary adaptations to land and buildings have been a feature of cities for several decades, often connected to specific crises (e.g., dereliction and economic recession) or needs (leisure, food growing, play, etc.). COVID-19 radically transformed how cities functioned, including their buildings, open spaces, and transportation systems. Neighborhoods became increasingly important in the social (and daily) life of urban residents. Reduced car traffic and increased outdoor activity at the neighborhood level increased the need to expand access to alternative green and outdoor spaces (Stevens et al., 2024) to facilitate walking, exercising, playing, and socializing. Adaptability and emergency-driven interventions thus became common worldwide—particularly in Europe and North America (Andres, 2025)—fostered by prompt opportunities to experiment with urban spaces through temporary redesign and repurposing (Gregg et al., 2022). Temporary and low-cost pop-up bike and running lanes were created in many countries across Europe, North America, South America, and Australasia (Ortar and Rerat, 2024; Lataville and Mitra, 2025). Most cities around the world also allowed restaurants and cafés to expand onto sidewalks and streets to support their survival.

Temporary adaptation processes were initially developed as reactive measures designed for flexibility because no other rapid alternative solutions were viable (Andres, 2025). Eventually, these adaptations evolved toward either being made permanent or removed. In effect, pandemic responses reflected an "intriguing combination of political and economic trajectories that are often seen to be in conflict—for example, deregulation and regulation, or laissez-faire versus government-controlled markets" (Warnaby and Medway, 2022, p.10). For temporary urbanism, this meant quick-fix adaptations founded on expedited transformations to the built environment through either full deregulation or softer regulations, with little or no participatory consultation before implementation (Andres, 2025). At the same time, local communities were involved in implementation and operations, thereby connecting communities and neighborhoods to the governance of adaptability. We refer to these as hybrid forms of temporary urbanism, where the boundaries between top-down (government-led) and bottom-up (community-led) arrangements are blurred, fostering local empowerment. Within this context, adaptability is exercised with agility, emerging from relatively weak forms of governance. We understand "weak governance" here as related to weak planning (Andres, 2013). The way spaces are governed and managed is anchored in a context of crisis. Arrangements between different stakeholders are more fluid and less focused on compliance. Power and ability to shape spaces are more easily transferred to nongovernmental bodies if trust, as we will discuss later, can be established, and resources can be mobilized promptly.

There is an interesting paradox here at the core of the governance of adaptation processes. Indeed, in the context of a sudden crisis like COVID-19, public organizations rely on civil society actors as well as private actors (Rendall et al., 2022) due to a lack of critical resources and organizational capacity for mounting an effective and nimble crisis response (Boin and Lodge, 2021). This lack of resources leads to various forms of partnerships and collaborations between state representatives, who see their expected roles heightened (Brail and Kleinman, 2022), and non-state actors (including community representatives) (Rendall et al., 2022). This was a clear manifestation of how to build local government emergency capacity to address unprecedented change (McGuirk et al., 2022) and relates to the concept of adaptive governance (Janssen and van der Voort, 2020; Nolte and Lindenmeier, 2024). Several factors emerged in early pandemic studies to explain the evolution of adaptive governance during the COVID-19 crisis. First, the convergence between change and stability was seen as crucial in times of crisis and needed to be preserved (Janssen & van der Voort, 2016; Janssen and van der Voort, 2020). Second, bureaucracy and process—through well-designed institutional scripts and procedures—while favoring slowness and slack, were seen as enabling a fit-for-purpose system to respond quickly and break silos (Janssen and van der Voort, 2020). Third, the existence of prior relationships between organizations led to more fruitful pandemic-related collaborations (Nolte and Lindenmeier, 2024). Fourth, the role of conflict and criticism in triggering critical responses and driving change is significant, as is the importance of diverse responses in accommodating uncertainty and a rapidly evolving urban environment (Janssen and van der Voort, 2020). Fifth, in a time of crisis, cities borrowed from one another's public space adaptations, despite the knowledge that policy is not always mobile or transferable (Temenos and McCann, 2013).

The above factors align with the underpinnings of the governance of adaptation, from sudden reaction to prolonged implementation and legacy, and are linked to other disruptions and crises. Importantly, the unprecedented nature of COVID-19 meant that directions for a return to normalcy could not be predicted with certainty. This left a gap for experimentation and,

specifically, for adaptive governance and hybrid temporary urbanism, which became progressively institutionalized, fostering permissive conditions to institutional change and innovation (Marvin et al., 2023). Our focus on urban adaptations means that we are looking at the implications of these experiments through a spatial lens, with regard to the legacy of transformations of streets and sidewalks—and how these were governed during and post-pandemic.

Methodology

The research employed a combination of qualitative methods. The authors conducted 34 semi-directed interviews with key stakeholders from within and outside government agencies. Participants were selected based on their roles at the city or project level and their involvement in outdoor adaptations. They were either directly identified or contacted through snowball sampling. From February 2022 to May 2024, 23 interviews were conducted online and in person in NYC with senior leaders from local government, community, and Business Improvement District representatives, as well as temporary urbanism advocates involved in the OR and OS programs. In 2024, 11 interviews were conducted online in Toronto with senior municipal staff, as well as leaders of nonprofit organizations, including business associations. In Toronto, data collection began later due to the timing of a collaborative opportunity, which explains the variation in the number of interviews. Interviewees were selected based on their involvement in the ActiveTO or CafeTO programs and their extensive experience in policy, governance, and civic leadership. Interviews focused on understanding municipal efforts to strengthen urban resilience through adaptability, temporary urbanism, and emergency response programs in times of crisis. Ethical clearance, including anonymization, enabled frank and open information sharing during interviews. Interviews lasted between 30–60 minutes. All interviews were transcribed, coded, and analyzed to extract commonalities and differences across the two cities.

To enrich the analysis, we evaluated publicly available governance documents and reports for both cities. Data from these reports span the period from the start of the pandemic through 2024. We appended the phrases "before COVID-19," "during COVID-19," and "after COVID-19" to each of the following search terms: "adaptation techniques," "path-dependency," "cars," "bicycle lanes," "pedestrians and sidewalks," "community-led initiatives," "outdoor," "plazas, parks, and gardens," "government lockdown policies," "government and communities," "power and control," "funding," "informal and formal approaches," "socioeconomic implications," "policy coordination," "accessibility and mobility," "leadership and vision," "COVID-19 as accelerator," "active travel," "open streets and restaurants," "materiality and regulations," "indoor and outdoor dining," and "creative adaptations and schemes." We used these to identify documents and extract relevant information. Policy documents helped set a clear timeline for governance activities in both cities, informed the narratives provided through interviews, and included supplementary data that refined our understanding of the two cases. Together, these sources enhanced our understanding of governmental response timelines, the policy rationale behind the programs, and stakeholder involvement. Our research also incorporated a review of scholarly sources, which informed our understanding of adaptive governance and temporary urbanism, and framed our analysis within urban studies debates on the legacies of COVID-19.

The next two sections explore how these programs (and their legacies) illuminate the evolution of hybrid temporary urbanism, the role of adaptive governance mechanisms, and their institutionalization.

Governing experimental outdoor adaptations in unprecedented times

This section focuses on the manifestations of hybrid temporary urbanism in a context of emergency urbanism (McGuirk et al., 2021). It investigates the factors that precipitated reactive adaptations in NYC and Toronto, and examines the mechanisms that enabled prompt adaptive governance, thereby complementing Latanville and Mitra's (2025) analysis of the conditions underpinning policy change.

Unprecedented temporariness and policy responses

In March 2020, both Toronto and NYC declared states of emergency and entered lockdown. As the immediate public health needs were being addressed, the public life of cities deteriorated precipitously, impacting everyday living and local businesses. This triggered reactive programs based on the temporary transformation of streets and open spaces.

In Toronto, early suggestions that the streets could be used for commercial and recreational purposes were initially met by city officials with a negative response. In part, this was a cautious response focused on the emergency at hand. Ultimately, Toronto launched its ActiveTO program in May 2020, followed by CafeTO at the end of June 2020. NYC, on the other hand, rapidly kick-started a discussion among key city departments to convince stakeholders that shifting the use of streets and sidewalks was a relevant way to spend resources and ensure that people remained safe. After initial resistance by Mayor de Blasio, the Open Streets (OS) program was launched at the end of April 2020 pursuant to an ambitious push by Transportation Alternatives (TA) and local partners (Transportation Alternatives, 2020), followed by the Open Restaurants (OR) program in June 2020.

In automobile-oriented cities, like NYC and Toronto, contention regarding access to streets for non-automobile uses and users is a source of significant debate and disagreement. Before 2020, NYC had already started a "streetfight" (Sadik-Khan & Solomonow, 2017) to create pedestrian-oriented plazas including Times Square, an initiative trialed in 2009 and made permanent in 2014. This provided the city government with knowledge, support, and tools to expand the principles of alternative street use at city scale. In Toronto, interviewees acknowledged that the experience of implementing two street-based demonstration projects in 2019 helped pave the way for the temporary interventions implemented in the context of ActiveTO. Additionally, the city had completed a two-year process that led to the approval of new Municipal Code guidelines (referred to as Chapter 742) for streetside and sidewalk cafés; these guidelines came into effect in fall 2019, with the expectation of significant uptake in spring 2020 (City of Toronto, 2023). The pandemic led the city to create a "temporary CafeTO program and accompanying guidelines, which bypassed certain elements of Chapter 742 in order to quickly expand available outdoor dining space" (City of Toronto, 2023: 10).

In both cities, the state of emergency generated unprecedented momentum for launching ideas to retrofit city streets and temporarily transform street spaces as public spaces, in support of local residents and businesses. The 'people' instead of 'car' focus fostered by

pandemic lockdowns and closures was key in convincing the relevant parties to engage in reactive transformations and push for hybrid temporary urbanism solutions, particularly in neighborhoods lacking access to green and public spaces.

In Toronto, for instance, an interviewee noted:

> One of the critical assets that a city can offer to businesses that front onto a public right of way is access to space... [The city] decided to make what had been public space used primarily for moving motor vehicles through the right of way, available at steeply discounted rates to commercial businesses for profit, but also for a broader public benefit in the need for public space (Toronto, Interview 5).

Similarly, in NYC, the OR program was seen as a way to "think of all the different things that we can do with this curb space, because it doesn't just need to be for people parking their cars" (NYC, Interview 4). The scheme was thus driven by a societal commitment, as our interviewee continues: "People weren't going anywhere and they needed to just be able to get out and walk and the restaurants needed to stay alive. Everybody wanted to keep their restaurant industry alive. So we came up with these radical things" (NYC, Interview 4).

By the end of October 2020, 9,000 restaurants were registered to take part in the OR program, affecting 87 streets throughout NYC. In Toronto, 801 restaurants participated in the first round of the CafeTO initiative, sparking demand for the program to be extended and growing participation to 1,213 restaurants in the 2021 iteration of the program. The rollout of these programs demonstrated excitement about the novelty of animating streets differently; this allowed both cities to trial European-style models of outdoor urban life with a focus on urban aesthetics and cultural experimentation.

Similarly, by May 2020, 30 miles of open streets were created in NYC, reaching 83 miles a year later (the highest achieved total in the U.S.), and these were concentrated in the more affluent boroughs of Manhattan and Brooklyn, and to a lesser extent Queens (NYC Office of the Mayor, 2021). OS were led by either Business Improvement Districts or collectives that involved communities or local businesses working together. The goal of giving back the street to people was the main narrative behind the transformation, from "reimagining the streets in highly residential neighborhoods" to creating "more public space when everybody is squished into these tiny apartments" (NYC, Interview 3). OS provided an alternative space of encounter to New Yorkers, similar to parks and playgrounds.

In Toronto, ActiveTO was introduced in May 2020 and comprised three parts: Major Road Closures, Quiet Streets, and Cycling Network Expansion (City of Toronto, 2021). Major Road Closures emphasized the closure of main thoroughfares to cars, opening them to pedestrians and cyclists. The program involved temporary street closures on weekends and holidays beginning in the summer and early fall of 2020. Quiet Streets aimed to slow cars and other vehicles, and was implemented on 65 km of streets, across approximately 30 Toronto neighborhoods. The number of Cycling Network Expansion projects implemented in 2020 reached historic levels for Toronto. Interviewees attributed ActiveTO initiatives to urban improvements, with one suggesting that "Open Streets were one of a number of factors pushing Toronto toward a more cycling- and sustainable-transportation-friendly city" (Toronto, Interview 3).

Mechanisms prompting adaptive governance

Speed of implementation and mechanisms behind the adaptive governance of these outdoor adaptations relied on agile delivery and flexible regulations inherent to a weak adaptive governance context. Here, hybrid temporary urbanism was informed by techniques used by tactical urbanists (The Street Plans Collaborative, 2016); this included the use of makeshift materials ranging from wood panels and bollards to concrete and steel barriers. Typically, in NYC, a lenient approach to inclusive design characterized open dining schemes, using a limited local access model for OS, allowing the city to prioritize pedestrians and cyclists on the streets while not entirely removing cars. Experimentation was made possible through soft deregulation.

As noted by a DOT representative:

> "We were able to make the case that all of the more substantial insurance requirements and indemnification and the kind of super thick agreement that we have for a lot of closed spaces [i.e. indoor spaces] were not appropriate or the right tool nor calibrated to the actual risks that were on these Open Streets." (NYC, Interview 3).

A Toronto interviewee made a similar argument:

> "For some of our quick build cycling infrastructure expansion, we try to use planters, and we try to use concrete barriers that have murals on them to encourage communities to really appreciate the safety of the interventions and see some aesthetic improvement out of what often looks like a construction zone." (Toronto, Interview 7).

On the whole, reactive adaptations of outdoor spaces were facilitated through an unprecedented, multi-layered, and adaptive governance process favoring prompt transformations. Further, adaptations were embedded into hybrid arrangements between partners with a focus on unsiloed approaches, trust, and empowerment; these exemplified unprecedented forms of temporary urbanism. Here, trust relates to parties' acknowledgement of others' knowledge, skills, ability to deliver change, and overall reputation (Andres, 2025). Combined, they favor weak rather than strong forms of governance (Andres, 2013) where agility enables the prompt transformation of spaces.

The first layer of partnerships was between funders and municipalities. In both cities, federal emergency funding was crucial to support pandemic response programs. In Toronto, the city received federal funding that was used to offset the costs of the program, especially CafeTO. This funding enabled the municipal government to waive licensing fees for participating restaurants. Similarly, NYC and the DOT received federal stimulus – more than $5.88 billion - as part of the American Rescue Plan Act (NYC Mayor's Office of Management and Budget, 2021). These funds had to be distributed and spent quickly.

The second layer of partnerships was intra-municipal and intra-governmental. At the local authority level, street-based responses to the pandemic required internal collaboration among city departments. Responses were typically led by transportation departments, due to their experience with operations activities as opposed to policymaking. As an interviewee

suggested, an operations-oriented unit has more capability to adapt and experiment: "Divisions that have that operational part to them are more nimble in being able to do those kinds of things, the temporary things" (Toronto, Interview 2). However, given the complex and fragmented nature of municipal and multi-agency responsibilities, internal coordination was fundamental to the success of initiatives. In part, it was needed to ensure that proposed plans did not negatively interfere with protective-led measures. In both NYC and Toronto, interviewees highlighted the shift toward rapid intra-municipal partnership-building as a means of addressing immediate needs.

The strength of NYC and its ability to implement reactive adaptations quickly was driven by the "very collaborative and unsiloed effort" (NYC, Interview 1) of key city agencies: Department of Transportation, Health, City Planning, Parks, Small Business Services, and the Mayor's Office. "Being all on Zoom allowed us to have these really quick real time collaborative conversations that got to a lot of answers really quickly in a way that was also just very impactful to the outcome" (NYC, Interview 3).

Similarly, in Toronto, leaders from Transportation Services, Economic Development & Culture, and Municipal Licensing & Standards met for a series of discussions to address how to sustain and revitalize the small business sector—in part through the introduction of CafeTO. Credit was also given to the ability to be creative, and the need for trust among collaborators to agree on actions:

> The ability to do really creative work requires a lot of people to hold the same values in a lot of different divisions, because naturally one division will get put in charge of a big project, and unless there is a value within that division of risk taking and innovation and creativity. I don't think that you'll see another big project come out, like CafeTO (Toronto, Interview 11).

The importance of trust was also shared by NYC interviewees referring to other city services and representatives from communities and local organizations running outdoor adaptations. "Folks trusted us. We trusted them. And we really grew from there" (NYC, Interview 3). This constituted the third layer of partnerships, i.e., between municipal governments and nonprofit organizations and community groups, which was underscored as a precondition to successful street-based programs. Trust was developed through previous experiences and collaborations that existed before the pandemic (i.e., established relationships between organizations) but also linked to more personal acquaintances (individuals having heard of each other's work through networks and word of mouth). Trust was fostered by the unprecedented ability to experiment with minimal long-term risks, from a political, financial, and liability perspective.

This third layer intrinsically relates back to the previous point about the people and living environment focus of those schemes. As noted by one of the NYC interviewees, "We are seeing people really creatively put in the effort and the time together to think about the ways in which they want to shape their community. This is really about people claiming and reclaiming their home, their community institutions, whether that be their mosque or their school." This returns to flexibility in application processes and ways of running schemes, as well as trust, which meant that OS and OR schemes could be developed from both pre-existing and new collaborations run by community groups or larger organizations like BIDs.

The foundations for these relationships, in many cases established pre-pandemic, formed the basis for experimentation. These played an important role in Toronto due partly to its conservative approach to experimentation. From the perspective of an external partner to CafeTO, relationships were paramount. For Business Improvement Areas (BIAs), these connections included relationships with the local councilor and residents' associations. According to a BIA representative "if we hadn't established those partnerships and champions within City Hall, I think it would have just been like, no, this doesn't fit our process. We can't really support this, and I think that's where we caught a lot of no's at the beginning" (Toronto, Interview 4).

Overall, in a time of unprecedented crisis, both cities displayed innovative and reactive modes of governing adaptability. Their responses partly depended on existing schemes, regulations, partnerships, and networks. Innovations and the degree of experimentation arose from how small ideas spread into large programs and were developed very quickly. Agility was key, underlying how these adaptations evolved and the post-pandemic legacies they produced.

Evolution and legacy of adaptive governance and temporary adaptations.

In NYC and Toronto, temporary outdoor programs were made permanent. However, the shift from temporary to permanent included governance changes that underscored a return to normalcy and normal expectations, and were characterized by less agile processes. In this section, we examine the uneven legacy of hybrid temporary urbanism in both cities and how it led to more formalized hybrid adaptations and stronger governance of urban adaptability.

Uneven legacy

Socioeconomic and spatial characteristics of places, as well as political momentum, mattered greatly in the evolution of hybrid temporary urbanism in both cities. This impacted how temporary adaptations were run, where, by whom, and their frequency and scale.

In NYC, it became apparent that, with the exception of a few schemes in Queens, Harlem, and the Bronx, the most affluent communities, neighborhoods, and businesses were more inclined to host open streets and dining schemes. These communities tended to have more resources, such as staff in BIDs able to apply for and run schemes; residents working remotely with spare time to spend in and for their neighborhoods; and restaurants with financial means to invest in temporary structures. In addition, affluent groups were advantaged with respect to possessing the knowledge and skills inherent in a people-led approach.

> There's definitely not a one-size-fits-all approach. I think that's what makes open streets unique—that we really empower the community to take whatever kind of look and feel they want to develop for the open street (…) Such community involvement (…) has a lot of privilege attached to it. (NYC, Interview 1).

To address recognized gaps, DOT mobilized resources and engaged organizations (typically StreetLabs) to work with communities in deprived neighborhoods (e.g., the Bronx) to support the development of Open Streets. Likewise, evaluations of both ActiveTO and CafeTO demonstrated how the intra-urban geography and sociodemographic characteristics of Toronto influenced the location and rollout of initiatives. CafeTO, for instance, was

implemented in collaboration with local BIAs, which tend to be concentrated in downtown neighborhoods and not distributed equally across the city. Ultimately, Toronto used federal pandemic recovery funding to launch a separate program called plazaPOPS, piloted in 2019 to serve businesses located in inner suburban neighborhoods, particularly those focused on strip malls. Similarly, while ActiveTO programs were designed to prioritize areas with lower neighborhood equity scores, the city's own analysis confirms the limitations of this approach (City of Toronto, 2021, p. 6).

In both cities, the involvement of BIAs/BIDs undoubtedly exacerbated inequities during and post-pandemic, illustrating that these organizations have consistently supported a neoliberal development agenda based on an uneven spatial allocation of resources (Douglas, 2018). The inequity revealed itself in uneven resources for organizations to apply for funding and manage the schemes, from event scheduling to running events, including ensuring safety. As a result, NGOs and organizations that continued running OS and ActiveTO schemes had to identify additional funding support or reduce/end some initiatives.

Issues of equity also resonate with challenges of representation and participation. Hybrid temporary urbanism and expedited emergency programming were often made possible by superseding consultation. Yet, when governments return to the expected levels of consultation, these discussions can impede the timeliness of initiatives while improving equitable outcomes. In both cities, consultation is connected to political agendas or the lack thereof. This significantly affected how outdoor adaptations were governed and evolved post-pandemic. In Toronto, as the emergency period subsided, decisions regarding the use of city-owned roads became increasingly politicized. As an example, part of the ActiveTO program which closed major streets to vehicles in downtown Toronto on spring and summer weekends faced growing opposition related to reduced vehicular access to streets, businesses, and surrounding areas. Data showed that the ActiveTO closure of Lake Shore Boulevard (a wide, waterfront thoroughfare in downtown Toronto) to car traffic resulted in a four-fold increase in cyclists as well as a 25 percent increase in pedestrian traffic (City of Toronto, 2022). However, by 2022, with the return of street festivals, sporting events, and vehicular traffic, the city's Transportation Services department brought forward a recommendation "against regular recurring weekend closures in favor of an approach that allows for a limited number of ActiveTO closures" (City of Toronto, 2022).

In NYC, by contrast, OS and OR remained supported throughout, and, despite lawsuits filed against the DOT, it did not face political backlash. The program was not used politically as a flagship project either (with the exception of the 34th Avenue Coalition Open Street, which received significant political attention and financial support) and hence remained softly supported post-pandemic. Similarly, no attempts were made to link up open streets in a more coordinated network; while this led to limited spatial integration at the city level, it also allowed a continuum of ad hoc people-led mobilizations. As we will discuss later, however, these mobilizations had their own consequences.

Toward more formalized hybrid adaptations: from weak to stronger governance

Resources and regulatory processes strongly impacted adaptive governance, hybrid temporary urbanism, and the level of flexibility permitted post-emergency. Indeed, going back to the point of weak governance, the actions that municipal governments were able to take in

a state of emergency exceeded what normally might be permitted. For open dining/CafeTO, this included the use of parking spaces for commercial purposes and broad public benefit, through a temporary change of regulations and the introduction of steeply discounted rates.

Sustaining the scheme post-COVID made the replication of "cool and valuable things" outside of a period of crisis extremely challenging. By formalizing CafeTO, the city embedded the program into its public realm repertoire and imposed various changes, notably related to safety, accessibility, and fees. In other words, flexible, adaptive governance could not be justified in a non-emergency context. Furthermore, stronger governance of adaptability and temporary urbanism was required for compliance purposes:

> Once you formalize bylaws to go beyond the pandemic, all of a sudden, things like AODA (Accessibility for Ontarians with Disabilities Act) kick in. So all of a sudden, you had to put in floors or platforms that were level with the sidewalk, so full accessibility... Fees on a per square meter basis had to be imposed… So the city was no longer absorbing all the fees associated with the program (Toronto, Interview 9).

Similarly, while NYC didn't abandon its open dining programs, it modified how they were implemented. The program moved away from its experimental and creative pandemic underpinnings in a context where exceptionality and soft regulations could not be justified anymore. In addition to making the scheme seasonal, NYC introduced strict guidance and control over the nature of outdoor temporary extensions, making it more difficult and costly for local restaurants to create outdoor seating areas, which in effect reinforced the equity issues noted previously. As noted by a representative from DOT:

> It's not too dissimilar, there's more design guidance, there are fees... and there is a seasonal aspect to it for the roadway parking-lane areas, and they can't be "sheds" really anymore, they're more like three-sided elements, there's no overhead—you know, you can have light overhead, but not as we saw during the pandemic (NYC, Interview 1).

In essence, in both cities, adaptive governance allowed for temporary adaptations to thrive, while the transition from reactive emergency solutions to permanent programs led to a shift in how adaptability in a non-emergency context was managed. Indeed, the reliance on civil society actors (Rendall et al., 2022) was key to experimentation, but the change to permanence and a return to normal conditions led to changes. These included a loss of participation in leading street-closure projects due to community fatigue and funding/time pressure, but also far less spontaneity and flexibility in the use of space, with stricter processes and less leeway to innovate. This effectively signals a stronger governance of temporary urbanism. In NYC, some OS schemes have stopped running and the number of active open streets declined; this suggests a more selective process based on people (who is involved? who has time?), space (where is it located? how big is the scheme?), and overall recognition (hence the ability to generate support and visibility and secure additional public and private funding).

For many of our interviewees, evolution did not represent a failure but an inevitable part of hybrid temporary urbanism. For them, "Experimentation was a way to engage with communities" (NYC, Interview 22) and should be considered a key lesson from the pandemic

on how to empower people in times of crisis. Experimentation through weak adaptive governance facilitated engagement and allowed testing. It fostered wider engagement with local communities, allowing some who may not be involved in traditional participation processes to have their say. Indeed, the narrative behind experimentation was an emergency response based on testing; it was not a commitment for the experimentation to become permanent. This is an important aspect of adaptive governance and hybrid temporary urbanism in times of emergency. The weak governance of adaptability translated into porous, agile, and unsiloed approaches. This counteracted traditional strong governance mechanisms, which are not agile enough to facilitate reactive changes due to their fragmented and rigid nature (Andres, 2025).

Discussion

The transition process through which both cities engaged with adaptive governance attests to a similarity in approaches toward tackling complexity in highly volatile and uncertain environments (Greve et al., 2020). In other words, local governments were both weak (through the governance of adaptability at the local and micro level) and strong (in the way emergency urbanism manifested in a city-level decision to trigger and allow flexible ways of adapting spaces). This hybridity was manifested as rapid, innovative, and strong emergency-led responses that prompted adaptations involving fewer bureaucratic and regulatory processes. A new stability in responding to unprecedented change was constructed on the assumption that it was, by its nature, temporary. Hybridity was made possible through the mobilization of community groups, local businesses, and business coalitions, built on both previous and new collaborations beyond what scholars have argued (see Schomaker and Bauer, 2020; Nolte and Lindenmeier, 2024). Tensions around "ownership" of curb space in front of restaurants and their neighbors led municipal governments to undertake conflict-resolution work that involved managing expectations, negotiating disputes between tenants, and addressing concerns about noise, garbage, and accessibility complaints. Conflicts and criticisms were not used to shape reactive approaches. Instead, they were carefully handled in the legacy phase and in the process through which outdoor schemes were transformed and sustained through more regulated arrangements and stronger forms of governance. Once the most urgent phases of the crisis concluded, regulations revealed a shift from diverse to more standardized (and controlled) approaches to outdoor uses, emphasizing a return to normalcy and the end of emergency urbanism.

Cities' governments achieved pandemic-focused adaptations by taking a far less siloed approach to urban management and by moving towards creative, innovative urban placemaking. Although far more obvious in NYC, this was also the case in Toronto. Clearly, NYC benefitted from an ability to engage with adaptability by building upon two decades' worth of knowledge, tools, and support (Douglas, 2018; Andres, 2025). The city was able to innovate and diversify its approaches to outdoor space adaptability, which enhanced its ability to cope with the immediate impact of the pandemic and foster resilience. This resulted from the positive transformations that characterized cities as a result of health-led emergency urbanism (Connolly and Kythreotis, 2025). Here, adaptability was constructed around dynamic approaches and tailored leadership through experimental and place-based governance mechanisms that fostered flexibility. Thanks to hybrid temporary urbanism, local communities and businesses were supported during a time of significant social and economic crisis. The emphasis on urban adaptation, focused on public spaces, provided material and immediate

opportunities for sustaining urban vibrancy, as well as the potential for longer-term improvements. Street-based dining programs created social interaction and urban vibrancy, while at the same time allowing the continued operation of thousands of businesses that otherwise may have failed. This demonstrates that even in a time of reduced public consultation, collaboration and community relationships made a difference in the success of hyperlocal initiatives and partnerships. It also offered a rationale for supporting local economic development through new ways of using public spaces, beyond an exclusive focus on vehicular mobility, and highlighted the value of taking a people-centric approach to deliver change. Overall, hybrid temporary urbanism served as a means to fill gaps in accommodating unprecedented changes in the functioning and use of cities during times of emergency, while also operating as a localized way to exercise local democracy in neoliberal cities (Andres, 2025).

Our analysis suggests that adaptive governance was socially progressive in both cities, leading us to question how this stance contributed to transformative changes. It can be argued that what NYC achieved during the pandemic resonates with some of the principles of "fearless cities" (Russell, 2019, Thomson, 2020). At a very local scale, adaptations promoted new radical democratic processes where citizens were handed the power to decide what they wanted to do on their local streets, while tackling social justice in addressing unequal access to green and outdoor spaces. Interestingly, these principles were not activated through new forms of citizenship, but rather through innovative solutions spearheaded by the NYC Department of Transportation (DOT). In Toronto, civic and citizen voices influenced experimentation and adaptation, and open street initiatives demonstrated an effort to create equity in terms of intra-urban geography. However, it would be a stretch to suggest that Toronto's approach aligned with fearless-cities practices.

Socially progressive adaptive governance does have an exclusionary dimension beyond the spatial and socio-inequalities pointed to earlier. In Toronto, because these public space initiatives featured local ownership and relied on community embeddedness, some people who had no prior relationship to a neighborhood or street felt exclude. They had the impression that the street was not only closed to vehicles, but also to outsiders. Conversely, in NYC, an emphasis on creating spatial parity in terms of the location of open-streets initiatives resulted in resistance, particularly in some low-income neighborhoods (but not exclusively) where residents experienced OS as a perceived loss of access to their cars.

The trajectory followed by both cities also revealed that adaptive governance cannot be sustained and perhaps should not if its purpose is to respond to unprecedented crises. This finding raises questions about how governments can better prepare for various and multiple crises, learning from both their own previous experiences, and others. Connolly and Kythreotis (2025) draw the same conclusions in their review of post-pandemic urban planning and climate governance. While understanding that policy mobility has its limitations (Peck and Theodore, 2010), an emphasis on learning and adapting based on the experiences of other cities was a notable feature of pandemic experiments. Crises may be the most appropriate moments to test out the application of policies and practices from elsewhere, especially when the risks are relatively low, such as the temporary adaptation of streets.

In terms of how cities prepare for crisis, in a world increasingly characterized by polycrisis (Frankopan, 2024), many challenges remain. Are cities like NYC and Toronto better prepared

for another unprecedented shock? Responses are uncertain and what matters is the nature of such shocks. It is clear that with regard to the ability to experiment and adapt, the most important elements are not necessarily the specific plans for an entirely uncertain future, but rather the ability to mobilize diverse and flexible resources (financial, human, knowledge, skills) and, more importantly, to untangle lock-ins through a combination of agile strategies displaying both strong and weak forms of governance. This requires trust and a more devolved and place-based distribution of power in urban-making.

Conclusion

This paper examined the manifestation of hybrid temporary urbanism during the COVID-19 pandemic, its evolution in the post-pandemic period, and the enduring legacy of adaptive governance. In doing so, it contributed to contemporary debates in urban studies concerning the transformative—or potentially non-transformative—nature of emergency urbanism, with a particular emphasis on policy and decision-making processes.

The analysis reveals that both adaptive governance and the emergence of hybrid temporary urbanism were deeply contingent on scale and place. The adaptations observed during the pandemic, and those that followed, were highly localized, which rendered them more manageable within contexts characterized by flexibility and contingency. These localized responses enabled cities to navigate uncertainty with greater agility, often bypassing conventional bureaucratic constraints, thus enabling weaker forms of governance.

Transformative change was facilitated by relatively low levels of perceived risk. This was evident not only in the support received from local communities and businesses—minimizing the potential for conflict—but also in the limited spatial impacts of interventions. As a result, there was a pronounced emphasis on immediate benefits, with alternative uses of urban space widely interpreted as positive contributions to local economic and social resilience.

The implementation and outcomes of hybrid temporary urbanism displayed significant differences in terms of equity and inequality. These differences manifested in various ways, including disparities in access to financial resources (both in terms of available funding and the capacity to apply for it), the nature of the built environment (ranging from street dimensions to the availability of public spaces), institutional capacity to manage citywide programs and individual interventions, and the extent of political support and trust. Participatory processes also varied. Notably, cities often streamlined such processes during the emergency, raising questions about inclusivity and democratic accountability.

Reflecting on these findings, and in light of ongoing uncertainties regarding urban preparedness for future unprecedented shocks, this paper calls for further comparative research to engage with the complexities of navigating short-, medium-, and long-term uncertainties in urban policy, governance, and decision-making. Flexibility, while often a reactive mechanism, becomes a central feature of urban governance in times of crisis. As demonstrated during the COVID-19 pandemic, uncertainty persists throughout the indeterminate duration of such events, necessitating governance approaches that are both responsive and resilient. Future work must therefore account for the unpredictable nature of crises and their implications for governing urban adaptations over time. Central to these inquiries is the question of how knowledge about pandemic and post-pandemic adaptations is

retained and transferred to support effective and meaningful adaptive governance in future crises. This challenge underscores the need for cities and policymakers to identify mechanisms that enable creative, innovative, and equitable responses to be delivered with speed and precision.

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