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The Boundaries of Evidence-based Policymaking for Night-time Governance

Las fronteras de la elaboración de políticas públicas con base en evidencia para la gobernanza de la noche

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ABSTRACT

The emerging field of night studies spans diverse disciplines, methods, and practices, enabling global perspectives on cities after dark. Although recently prominent, the night has long been governed through noise regulation, law enforcement, cultural policy, and public lighting. As local governments adopt data-centric digital technologies promising real-time insights, new governance challenges arise, as nocturnal communities often remain invisible or misrepresented. This paper examines evidence-based policymaking for the urban night through three questions: (1) What counts as evidence in night governance over the past 30 years? (2) How are big and small data currently used? (3) What insights emerge from expanding evidence boundaries? Methods include literature reviews, legal/policy analysis, and qualitative study of municipal open data.
KEYWORDS: Night Studies; Big Data; Policymaking; Regulation; Urban governance.

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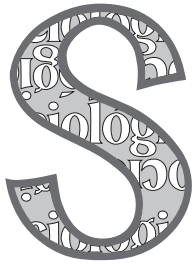
RESUMEN

El campo emergente de los estudios de la noche abarca diversas disciplinas, métodos y prácticas, que permiten contar con perspectivas globales sobre las ciudades después de que oscurece. Aunque sólo ha cobrado relevancia más o menos recientemente, la noche ha sido gobernada desde hace bastante tiempo por medio de reglamentos sobre la emisión de ruidos, aplicación de la ley, políticas culturales y alumbrado público. En forma simultánea a la adopción por parte de los gobiernos locales de novedosas tecnologías digitales que prometen vigilancia y observación en tiempo real, también surgen nuevos retos, sobre todo si tomamos en cuenta que con mucha frecuencia las comunidades de la noche permanecen invisibles e infrarrepresentadas. Este artículo examina la elaboración de políticas públicas basadas en evidencia para la noche urbana a partir de tres preguntas: 1) ¿qué puede considerarse como evidencia en la gobernanza de la noche en los últimos treinta años?; 2) ¿cómo se utilizan para su análisis los datos micro y los datos macro?; 3) ¿qué nuevas perspectivas surgen al ampliarse los límites de la evidencia? La metodología incluye una revisión de la bibliografía especializada, el análisis jurídico y de política pública y un estudio cuantitativo basado en datos abiertos a nivel municipal.

PALABRAS CLAVE: estudios de la noche, datos macro (big data), elaboración de políticas públicas, regulación, gobernanza urbana



INTRODUCTION

Over the past 30 years, evidence in urban night governance has changed significantly, reflecting broader shifts in urban policy, technology developments, data practices, and cultural recognition of the night-time economy (NTE). Evidence in policymaking refers to the need "that decision makers have good information to guide their choices about how current programs and policies are working and how they can be improved" (US Commission on Evidence-Based Policymaking, 2017). By the

1960s, governments were increasingly using structured evidence, specifically prioritizing randomized controlled trials to evaluate an array of social programs (Haskins, 2018). The term Evidence-Based Policy Making (EBPM) specifically "appears to have emerged with the election of Tony Blair's government in the United Kingdom (UK) and a desire to be seen to be taking ideology and politics out of the policy process." (Botterill, 2017: 1).

As EBPM has been pursued by a variety of governments, a few central focuses have arisen. One of these focuses is on efficiency in the allocation of resources, as demonstrated in South Africa's constitution, which specifies the need to promote "efficient, economic and effective use of resources" (Stewart *et al.*, 2019). Second, there is an increase in formal structures and procedures for evaluating policy. While these procedures can improve governmental transparency and decision-making, they frequently prioritize austerity over other ends. This is highlighted, for instance, in Brazil's Constitutional Amendment 109/2021, which alters the government spending rules aiming to improve policy evaluation (Saguin *et al.*, 2024), establishes a ceiling for emergency aid and limits civil servants' salaries.

Finally, EBPM has come to focus on large-scale statistics and data as the most, and potentially only, reliable form of evidence. This understanding is highlighted in the U.S. Commission on Evidence-Based Policymaking report (2017), which uses the shorthand "evidence" to refer to information produced by "statistical activities" with a "statistical purpose," foreclosing the possibility of using information and understandings produced by other means. The framework of EBPM has been taken up by a variety of governments and international aid organizations as a core component of the United Nations 2030 Agenda and its Sustainable Development Goals (SDGs) (Naffa, 2024).

With the widespread adoption of data-centric systems and the increasing datafication (Cieslik and Margócsy, 2022) of our lives, the large amounts of data points available facili-

tate the perception that data equals a truthful representation of reality. And this belief also feeds into the idea that the more data we collect, the more efficient services, products and transactions will be. This narrative focused on the reliance that powerful numbers have been criticized and questioned. For instance, Bouk et al. (2022) discuss how some categories of public data and official numbers are given with authority and often widely available, masking the fact that official numbers are also made and political. Recent controversies around authoritarian influence on the census in Brazil (Bedinelli, 2022) and the United States (Wang, 2025), for example, shed light on the politics behind public data and should be cautionary tales.

Espeland and Stevens, in "A Sociology of Quantification" (2008: 417), argue that "[t]he authority of numbers may be vested (1) in our sense of their accuracy or validity as representations of some part of the world; (2) in their usefulness in solving problems; (3) in how they accumulate and link users who have investments in the numbers; or (4) in their long and evolving association with rationality and objectivity." Nighttime governance, as it has been shaped over the last decade, does not escape from EBPM. However, nocturnal public data is scarce and fragmented (Reia, 2025), and data owned by companies using the urban territory at night (such as ride sharing and delivery apps) are not necessarily accessible for policy purposes.

On top of that, narrow definitions of meaningful and valid data can prevent better governance by overlooking non-public data or unofficial numbers. In the case of the urban night, official data collection has been day-centric and many activities that take place after dark are not, or should not be, counted and categorized. Moreover, data collection and memory-keeping has been a burden often carried by nocturnal communities, such as 2SLGBTQIA+ advocates and spaces (Campkin & Marshall, 2020; Campkin, 2024) and racialized minorities, away from governmental datasets and archives.

The efforts led by individuals to count themselves and preserve their data, as citizen-generated (Cázarez-Grageda *et al.*, 2020) data or community-based data collection, are extremely relevant for EBPM. By finding ways to improve engagement and access different forms of knowledge, the governance of the NTE can be more accurate while rooted in shared values of nocturnal cultures.

With this context in mind, two key arguments are presented here. Firstly, that night-time governance needs expansive notions of evidence that engage multiple people, processes and institutions in policy- and decision-making. Secondly, to be truly effective, night-time governance should engage with citizen-generated data and qualitative research as solid foundations to EBPM.

Given the interdisciplinary nature of the study presented here, this paper builds upon literature on critical data studies (Iliadis and Russo, 2016), night studies (Mercado-Celis and González, 2020; Gwiazdzinski *et al.*, 2020; Kyba *et al.*, 2020; Straw, 2020) and sociology (Espeland and Stevens, 2008) to fill out gaps in how evidence is conceptualized and operationalized in night-time governance. By understanding the limitations of narrow definitions of evidence, while simultaneously acknowledging the role of communities in EBPM, it is possible to reimagine a more people-centred (International Telecommunication Union, 2024), human rights-based (Sagasti, 2013) nocturnal governance. The research methods used include scholarly and grey literature reviews, legal and policy analyses, and an exploratory qualitative analysis of municipal open datasets.

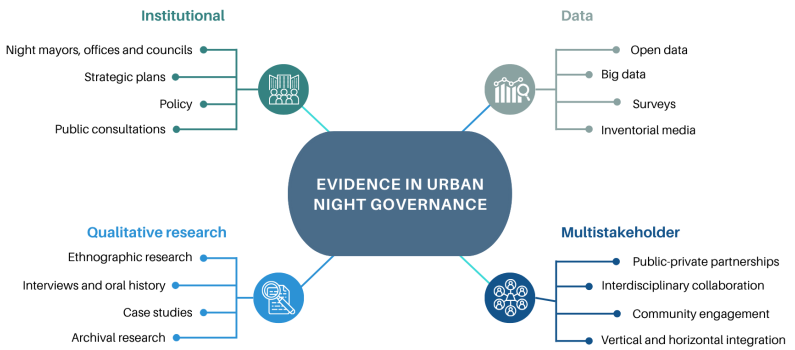
This paper explores the boundaries of evidence-based policy making for the urban night based on three guiding questions: (1) What has been considered evidence in urban night governance over the last 30 years? (2) What is the current state of the use of big and small data in night governance? (3) What lessons can expanding the boundaries of evidence make in night studies and their applications? The

structure of the paper follows a similar approach, divided into three sections. The first section proposes a comprehensive framework to look at evidence in urban night governance. The following section briefly discusses the role of large volumes of data in nocturnal policy- and decision-making, and the last section explores the importance of citizen-generated data and community-based data collection in EBPM.

EVIDENCE IN URBAN NIGHT GOVERNANCE

Night-time governance does not escape the increasing demand for evidence in policymaking, especially as cities navigate the intensification of the climate crisis, historical social inequalities and densification and urban planning challenges. Below is an exploratory approach (Fig. 1) to what is or can be considered evidence in night-time governance and policymaking, followed by brief discussions on each category. The categories overlap at times, and the framework presented here is a new way to organize scholarship, policies, media and practices.

Fig. 1
EVIDENCE IN URBAN NIGHT GOVERNANCE



Source: created by the author.

Institutional

Under the institutional umbrella, one can find efforts of data collection and use made by local governments and adjacent organizations in a dialogue with the public sector. The most notable example is the development of nocturnal governance through night mayor appointments, establishing night offices and setting up night councils. A concept that emerged in the early 2000s, the night mayor phenomenon, sometimes called night czar or ambassador, has been widely studied (Cibin, 2021; Mahmoud, 2025; Ross, 2020; Sejias and Gelder, 2020). These terms usually refer to appointments tasked with mediation between stakeholders (such as residents, local businesses and law enforcement) and management of the nightlife of a city. Currently, over 60 cities count with some sort of nocturnal governance mechanism aimed at balancing economic vibrancy with public safety and quality of life.

In 2020, a study by Seijas and Gelders analyzed data from 35 night mayors and advocacy organizations, revealing a growing consensus on the need for permanent nocturnal governance structures (Seijas and Gelders, 2020). The call for more evidence-based nocturnal policymaking gained even more voices during the pandemic. With the night-time economy being one of the first sectors to come to a halt without knowing when to reopen, policymakers, artists and advocates found themselves scrambling to find data about the economic impact of curfews and the shutting down of nightlife activities (Straw and Reia, 2021). International efforts, such as the Global night-time Recovery Plan project started in 2020, collected information and presented them in thematic chapters for different stakeholders. The chapters cover topics like innovation, building night-time governance capacity, sustaining local scenes and gathering data to measure the night.[1]

[1] See: <https://vibe-lab.org/global-nighttime-recovery-plan>.

Sometimes, local governments also commission studies and reports to consultancy firms, local researchers and advocacy organizations. Montreal, for example, appointed a Commissaire de Bruit & Nuit in 2020, under the department of Economic Development, whose initial actions included creating a data inventory of all relevant data for nocturnal governance, and commissioning reports to researchers through a partnership with the non-profit MTL 24/24. The first report covered a "diagnostic" of the urban night around the world and in Canada, as well as a study on Montreal's so-called informal nights (Bélanger *et al.*, 2020), the second presented the results of a public consultation conducted in 2020-2021 with policy recommendations (including the need for more data and consistent studies about the night) and, later in 2022, another report on the city's nightlife economic data (MTL 24/24, 2022).

Public consultations take many forms and are also considered relevant sources of information for policy- and decision-making. The literature on social participation has decades of findings about the performative nature of these processes, like the well-known participation ladder (source tk) and what more meaningful participation would look like. Similar discussions are present in data governance, in which claims and methodologies for data stewardship (Ada Lovelace, 2021) and data commons are gaining terrain with important lessons for public participation in nocturnal governance. For instance, data trusts, "create a vehicle for individuals to state their aspirations for data use and mandate a trustee to pursue these aspirations," and they can be built with participation at its core, "requiring systematic input from the individuals that set up the data trust" (Ada Lovelace Institute, 2021a: 5).

The partnerships with other stakeholders and the proximity to residents can offer local governments perspectives, indicators and data that would be hard to achieve otherwise. To develop night-time strategic plans, for example, night mayors and their equivalents need to understand the context in which

they operate. In London (UK), when Amy Lamé was appointed as night czar, she did "night surgeries," which included, according to the official website, organised visits to meet resident and community groups, businesses, councillors, night time workers and volunteers. They also involved being on the street and on public transport […] to understand their views on London at night."[2] The findings were published as short reports and later informed strategic plans and decision making. This practice brings governments closer to people and vice-versa, and when done properly, is an effective way to collect data about the city at night.

Other cities worldwide also developed night-time strategies focusing on safety, economic development, cultural vibrancy, and inclusivity. These often include stakeholder consultations, town halls and benchmarking against other cities. A comparative study conducted by Mahmoud (2025) shows that common challenges covered by such strategies are noise management, regulatory frameworks, limited diversity in activities, public safety, infrastructure, historical inequalities, adaptation to changing demographics and technologies, accessibility, preservation of cultural venues, lack of data and mobility. It is also worth mentioning strategies that address inequalities impacting specific communities are also significant, such as women's safety charters (London, 2019) and preservation of [2S]LGBTQ[IA]+ venues (London, 2019a). The latter is also monitored by scholars, including data about queer geographies and reports commissioned by local governments (Campkin & Marshall, 2020).

Cities have developed comprehensive night-time policies, often grounded in document-based analyses of local needs and international best practices. And, despite governance mechanisms being more established or receiving more visibility in the Global North, cities in the Global South (or Glob-

[2] <https://www.london.gov.uk/programmes-strategies/arts-and-culture/24-hour-london/night-czar>.

al Majority) also develop their mechanisms and data collection processes. A notable case in Latin America is Bogotá in Colombia. In 2019, the Bogotá city government published the 225-page report "Diagnóstico Bogotá Productiva 24 Horas," presenting a comprehensive analysis of the nocturnal nightlife that included data about mobility, safety, health, culture, tourism, governance and more. In 2023, Bogotá released a policy covering strategies to improve economic activities during non-conventional times (Serrano *et al.*, 2023). The policy is situated within international best practices and draws from the local context.

Qualitative research

Despite the interdisciplinary field known as Night Studies being relatively new (Acuto, 2019; Gwiazdzinski *et al.*, 2020; Kyba *et al.*, 2020; Mercado-Celis and González, 2020; Straw, 2020), research on various aspects of the night have existed for centuries, from the night sky to urban life after dark. As Night Studies takes shape through research and practice, scholars explore how nightlife is experienced and regulated through different methods: night ethnography, participant observation, in-depth interviews, spatial mapping, focus groups, policy and legal analyses, artistic practices and archival research.

According to night studies scholars, "walking, looking and mapping" can be considered core methods for understanding the social order of the night (Garcia-Ruiz, 2020). Ethnographies often explore how nightlife spaces are produced, regulated, and contested, thus highlighting issues like surveillance, exclusion, and belonging. Despite the limitations of ethnographies in fully grasping the complexity of urban life (Hong *et al.*, 2022), ethnographic works taking place across the world help to shed light into scenes, behaviors and sociability. Ethnographic work has also traced the shift from nightlife as a cultural redevelopment tool in post-industrial

cities to a more complex governance challenge involving safety, equity, and sustainability (Seijas and Gelders, 2020).

Interviews and oral history are vital tools for collecting evidence that informs policymaking and night-time governance, particularly in contexts where traditional data sources are insufficient. Oral history enables the preservation of lived experiences and community narratives, offering rich qualitative insights that can shape inclusive and responsive policies (Shopes, 2011; Perks and Thomson, 2015). In night-time governance, interviews serve as a bridge to uncover the nuanced realities of nightlife ecosystems. Acuto *et al.* (2021) argue for bottom-up approaches in managing the night-time economy, highlighting how local stories and histories, often gathered through interviews, can drive governance trajectories beyond Western-centric models. These methods not only democratize evidence collection but also ensure that policies reflect diverse urban experiences, particularly in the field of Night Studies.

Similarly, case studies also have been used to collect information about invisible or barely visible nocturnal communities and practices. Research by Robins (2025), for example, studied how the city of Malmö manages and regulates nightlife with a focus on DIY and grassroots spaces that are rarely counted in official efforts, demonstrating how informal actors such as underground venue organizers navigate and resist formal governance structures.

Lastly, critical archival research plays an indispensable role in shaping evidence-based policies by uncovering hidden, marginalized, or ephemeral records that traditional data systems often overlook. Histories of nocturnal cultural practices, such as 2SLGBTQIA+ nightlife or informal music scenes frequently survive only in fleeting community publications, police reports, or oral histories, challenging researchers to critically reconstruct and validate them through archival investigation. Adopting a critical archival studies approach further enhances this process by questioning whose voices are

represented, restoring narratives erased by conventional records, and ensuring inclusion of marginalized urban communities in policymaking:

> Moving with and beyond the critical and deconstructive work of the archival turn, the "participatory turn" has argued not only for the importance of access, reflexivity, and inclusion in existing archives; but for the recognition of grassroots community projects which directly challenge dominant archival practices. Mirroring the way in which archives have been used to bolster city, state, and colonial authority, memory-work can also shore up campaigns and movements which are being denied legitimate voice. (Burgum, 2020: 507)

This more inclusive archival lens is essential for holistic night-time governance, as it diversifies "valid data" beyond surveillance and administrative sources, allowing policymakers to integrate the full complexity of nocturnal urban life into more equitable, responsive, and inclusive policy interventions.

DATA

Despite the growing importance of data in urban governance, the night remains underrepresented in datasets. This "data invisibility" has been identified as a major gap in night-time governance (Reia, 2025). City governments have increasingly embraced open data as a strategic tool to enhance EBPM. This trend is particularly relevant in the context of night-time governance, where traditional data sources often fail to capture the complexity of urban life after dark. Concrete applications of open data in night-time governance are emerging globally. Berlin's Clubkataster,[3] a mapping tool developed by the Berlin Clubcommission, helps protect cultural venues from displacement, while VibeLab's Creative Footprint[4] project quantifies the cultural impact of nightlife, having prepared reports for eight cities: Copenhagen, Rotterdam,

[3] See: <https://clubkataster.de>.
[4] The reports are available here: <https://www.creative-footprint.org>.

Sydney, Montreal, Stockholm, Tokyo, New York City and Berlin. These initiatives demonstrate how data can be used not only for regulation but also for advocacy and urban planning. When Seijas and Gelders (2020) examined the rise of night mayors as key actors in urban governance, they identified a growing consensus on the need for permanent governance structures that integrate data-driven approaches, marking a shift from reactive policing to proactive planning. Big data will be covered in detail in the following section of this paper.

Well-established mechanisms to collect data like surveys and public opinion polls with residents can also complement information that is publicly available. Cali, Colombia appointed a "nocturnal manager" ("delegate nocturno") in 2016, considered one of the first night mayors in Latin America (Delgadillo, 2016). The tasks included revitalizing the nights of the city, so they would be more enjoyable for residents and tourists. A survey was one of the tools used by the local government to better understand the needs of locals and the kind of nocturnal activities that could be offered, from dance to sports.

It is worth mentioning two underexplored data sources: complaints and inventorial media. Seeing complaints as data is not new, as it is used in the public and private sectors to report dissatisfaction with services or products, felonies, noise and other aspects of urban life. For instance, analyses of complaint data can teach us about neighborhoods and behaviours, sociability and quality of life, as Roy (2024, n.p.) shows by writing on Toronto's 311 portal, which "is the city portal to make requests for municipal services or file complaints about violations of city bylaws." In scholarship, Ahmed (2021) uses complaints to explore power dynamics within institutions, calling it a "complaint feminist pedagogy." In this framework proposed for nocturnal evidence, complaints can provide valuable insights.

Another data source that documents activities, places and communities of everyday city life in non-obvious ways is inventorial media. Here, we follow Mattern's approach (2017) in seeing data and technology as long-standing features of cities, embedded in a multitude of cultural forms, from journalism to fiction and a wide variety of logistical (Durham Peters, 2013) and inventorial media (Straw 2015), such as guides, catalogs, weekly magazines and lists. Inventorial media has great potential in helping us make sense of the past and map the present nightlife of cities. Inventorial here

> […] refers to those media forms and content genres whose principal purpose is that of providing lists of events occurring at night in cities. If the inventorial is primarily a genre of the night, this is because it is concerned in specialized fashion with the regularized schedules of entertainment and cultural institutions, rather than seeking to capture the widely dispersed and elusive variety of social, economic and political activities which transpire during the day. (Straw, 2015: n.p.)

If inventorial media is a "prosaic," underexplored way to study the night and provide evidence, big data infrastructures, such as sensor networks, social media analytics, and mobility data, are increasingly gaining attention by being used to understand night-time patterns, following trends in urban planning (Hong *et al.*, 2022; Kandt and Batty, 2021). The insights provided by large volumes of data often lack contextual nuance, their integration across departments is difficult and there are issues of interoperability. Hence, the need for hybrid, mixed methods approaches and social participation in nocturnal governance.

Multistakeholder Engagement

Multistakeholder engagement is vital to effective night-time governance, particularly when rooted in evidence-based policymaking. Urban environments after dark are complex, comprising business owners, residents, law enforcement, health services, cultural operators, marginalized groups, and

public officials with competing needs and values. Integrating stakeholders fosters broad-based dialogue and collective ownership of policies, allowing governance structures to move beyond top-down enforcement toward coordinated, context-sensitive management of nocturnal public life. Cibin (2021) identifies six types of night-time governance mechanisms: public-private partnership (PPP), night-time commission, night mayors, night city managers, night lobby groups, and night advocacy groups. Under multistakeholder engagement as evidence, PPPs, lobby and advocacy all contribute to informed governance models.

For instance, the engagement between cities in networks generates not only important data but also opportunities for collaborations, sharing lessons learned and failures to avoid. A notorious example is the 24-Hour Cities Network, supported by Mastercard (Hyman, 2023), in which representatives of the Bogotá government co-led with New York City meetings and knowledge production around night-related topics.

This inclusive approach complements evidence-based policymaking by enabling diverse actors to contribute local insights, real-world experiences, and community-sourced data, particularly where formal datasets may be incomplete or biased, thereby enhancing the feasibility of policy interventions. Moreover, through structured deliberative processes such as stakeholder dialogues and participatory forums, decision-makers can interpret and apply evidence and negotiate value-laden trade-offs. In addition to engaging various stakeholders, vertical and horizontal integration is an approach that facilitates gathering more comprehensive data within government, and in relation to other organizations. Integration, in this case, can be the "coordination of different policy interventions targeted on a specific area or place," vertically and horizontally, challenging the typical sectoral delivery of policies and programmes by departments" (URBACT, 2025).

To be more efficient, meaningful community engagement and participatory processes (Bunea and Chrisp, 2022; Cassola, 2022) allow local governments to co-create solutions that are equitable, contextually grounded, and better received by affected populations. A similar argument can be made about interdisciplinary collaborations since urban night governance draws from urban studies, criminology, cultural studies, anthropology, design, environmental studies, data science and so many other fields and disciplines.

Next, we dive deeper into specific issues around big data within an evidence-based agenda of night-time governance.

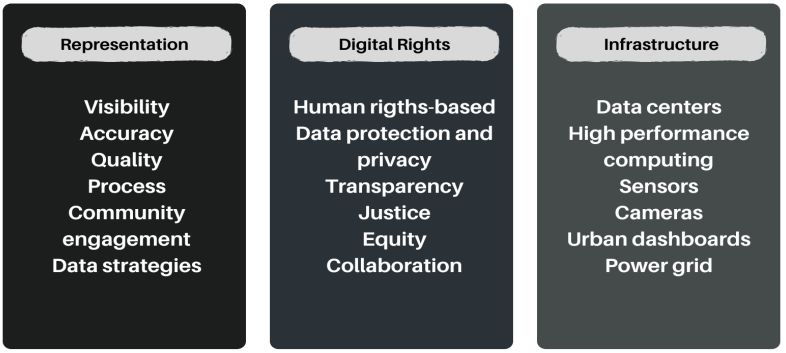
BIG DATA AND THE NIGHT

The current state of big data use in night governance reflects both growing potential and persistent challenges, especially around visibility, ethics, and inclusivity. Big data comes with various promises, from a more comprehensive understanding of the reality around us to efficiency in EBPM and the possibility of monitoring a city in real time (Kandt and Batty, 2021; Schreiner, 2016). As cities build operation centers anchored in the idea of urban dashboards that "don't merely seek to display information about a system but to generate insights that human analysts use to change that system" (Mattern, 2015: n.p.), data-centric solutions (including but not limited to AI) gain terrain as a rational and accurate way to govern complex territories. However, with the possibility of monitoring cities as large as São Paulo and London comes concerns about privacy, techno-authoritarianism (LaFrance, 2024; Lamensch, 2022), and ethical approaches to new technologies.

Among the main problems in the datafication of the night lie concerns that have been around for over a decade, thoroughly examined by critical smart cities and critical data

studies scholars (Iliadis and Russo, 2016). By bringing together these critical takes on urban technology and night studies, it is possible to propose a critical approach to the use of data-centric systems for policymaking in 24-hour cities. The issues can be organized as showcased in Fig. 2, around main areas of concern that shape the deployment of technologies and the role of evidence in governing urban territories.

Fig. 2
Three main areas of concern for the use of big data in 24-hour city governance



Source: created by the author.

The first key area is representation, which means how well-represented are different groups, activities, interactions, products and services in the data being used as evidence for policymaking. Despite the proliferation of smart city technologies, night-time activities remain underrepresented in urban datasets. Most data infrastructures are designed for daytime operations, leaving nightlife ecosystems such as cultural spaces, informal economies, and alternative forms of nocturnal mobility largely invisible (Reia, 2025).

Models built on datasets that do not include or misrepresent entire communities cannot generate accurate results.

The data points collected in this case do not provide proper visibility that is needed to make better policies. Furthermore, the quality of the data will always impact AI models that are trained using those data points, hence creating additional barriers for the use of such systems by public institutions. We have notorious examples worldwide, such as cities in the Netherlands using algorithmic-based decision systems for social welfare policies that created issues of bias and fairness to those most vulnerable (Guo *et al.*, 2025). Other examples exist on the use of automated decision systems (ADS), like immigration decisions by the Canadian government or governments acquiring data sets from data brokers (Shenkman *et al.*, 2021). These examples, although not directly connected to the night, act as cautionary tales of techno-solutionist (Morozov, 2023) approaches to policy and governance. The use of ADS for policymaking is not new but we are seeing an acceleration of the use of big data technologies by local governments in the past decade (Yigitcanlar *et al.*, 2024).

There is a growing recognition that big data alone cannot capture nuanced data (Hong *et al.*, 2022) and the full complexity of urban life after dark, especially in marginalized or informal contexts. If data about a specific community is not adequately collected, as it is the case for informal economies like street vendors or sex workers, there will be a limited understanding of their needs. Additionally, big data tools built on biased datasets will exacerbate existing issues (Buolamwini and Gebru, 2018), or create new problems related to surveillance of activities considered illegal or irregular, monitoring of dissidence and arbitrary law enforcement. The deployment of data-centric systems that may have a high impact on residents' lives involves, ideally, community engagement and participation in the decision-making process (Sieber *et al.*, 2024). As many cities lack data strategies, especially strategies that consider the night as a fundamental part of urban governance, the advancement of big

data into the city after dark should be done with caution, in a dialogue with communities and advocates for ethical use of technology.

One way to approach these challenges is focusing on digital rights frameworks, which usually include but are not limited to privacy and data protection, freedom of expression and other aspects of human rights in the digital context. The need to consider various levels of vulnerability of those inhabiting the urban night leads to claims of improved digital rights frameworks (Reia, 2025) that reflect efforts to improve justice and equity in data collection; transparency in technology use, especially when involving surveillance and safety; community participation; and ethical guidelines in responsibly integrating big data into night governance.

If an EBPM agenda relies increasingly on big data, concerns about infrastructure for 24-hours cities should also be one of the focus areas. The materiality of data has been largely studied across disciplines, drawing attention to the fact that the cloud is made of cables and sensors, and requires minerals, electricity and water to exist (Coleman, 2023; Hogan, 2018). As the demand for high performance computing and data centers grow, local governments need to consider the interests of local communities before expanding big data infrastructure, given that it puts a heavy burden on power grids and water consumption (Zewe, 2025), as well as creates issues of noise pollution.

Advocacy groups and coalitions questioning the indiscriminate growth of big data infrastructure share important lessons for night-time governance in the face of the climate crisis, such as the importance of municipal accountability, transparency and filling out data gaps from the perspective of residents.[5]

[5] Examples include the Virginia Data Center Reform Coalition (<https://www.pecva.org/region/regional-state-national-region/general-assembly/virginia-data-center-reform-coalition/>) and Indigenous resistance to data center expansion in Brazil (Martins, 2025).

EXPANDING THE BOUNDARIES OF EVIDENCE FOR 24-HOUR CITIES

Expanding the boundaries of what is considered valid evidence in EBPM and urban governance is fundamental to better support nightlife. The scarce availability of data concerning the night is rooted in the ephemerality of night-time activity, particularly in the cultural realm. The culture of the night is very often a culture of events, scenes and subcultures rather than of enduring institutions and databases. Ephemeral and informal activities taking place in cities often lack official records, and that is the case for a wide range of practices, from busking (Reia, 2025a) to do-it-yourself parties. When Harrison-Pepper (1991) affirmed that the history of street performance can be found in the laws prohibiting it, a parallel can be made: nightlife's history can be partially found in police records, noise complaints, moral codes, zoning laws, as well as in the memory-keeping efforts of nocturnal communities. Photos, videos, zines, weekly magazines, social media pages, mapping are all ways to inhabit and understand the night. These materials can be considered an expansion of the concept of "thick data." Thick data, according to Hong *et al.* (2022: 1741),

> […] is descriptively rich and intensively detailed, collected from or with research participants on issues relating to their values, visions, knowledge, life experiences, and opinions, typically obtained by observing or interacting with participants in their daily lives and through in-depth interview techniques. Thick data may be collected by using and analyzing a variety of formats including photographs, videos, sound recordings, sketches, and written ethnographic field notes.

The nuanced data produced through various qualitative methods and community-based data practices provide insights and interpretations that may not be properly captured by data science and big analytics. In a way, "[t]he strength of thick data, by contrast to that of big data, lies in its attention to details and of objects, movements, practices, human behav-

iors, and words […]. They can help to craft an in-depth and contextually nuanced understanding of peoples, cultures, and places […]" (Hong *et al.*, 2022: 1741). Here, however, we build upon and expand the notion of thick data, beyond academia and qualitative research, and follow emerging trends in promoting citizen generated data as alternatives or complements to big data as part of a global agenda.

Citizen-generated data refers to information created and shared by individuals or communities outside traditional institutional frameworks, often to address public issues or advocate for change. Complementing open data, it is gaining global recognition as a vital source of information for urban governance, especially in international multistakeholder spaces like the United Nations (UN) World Data Forum, organized by the UN Statistics division. Citizen-generated data includes participatory mapping, mobile app reports, and community surveys. Meijer and Potjer (2018) describe civic data as consciously produced and publicly available information aimed at supporting democratic debate and solving public problems. The UN Statistical Commission has acknowledged the importance of citizen data in monitoring Sustainable Development Goals (SDGs), leading to the development of the Copenhagen Framework, which provides guidelines for integrating such data into national statistical systems (Global Partnership for Sustainable Development Data, 2020). Later, documents such as the Cape Town, Hangzhou and Medellín declarations reinforced the "leave no one behind" (LNOB) principle of equality an non-discrimination in achieving the SDGs.[6] Regarding data collection and evidence, LNOB also means that historically marginalized communities should not remain invisible to governments and other stakeholders.

In the realm of nightlife governance, citizen-generated data offers a powerful mechanism to address recurring gaps in tra-

[6] For more details, see: <https://unsdg.un.org/2030-agenda/universal-values/leave-no-one-behind>.

ditional datasets. Community-driven data initiatives can illuminate marginalized experiences and underrepresented urban dynamics, particularly in nightlife districts (Reia, 2025). Mobile reporting tools and grassroots mapping platforms can document issues such as noise complaints, accessibility barriers, and safety incidents, providing actionable insights for policymakers. Queer mapping can preserve and shed light on how 2SLGBTQIA+ individuals experience the city after dark.[7] By incorporating citizen-generated data into night-time governance frameworks, cities can foster more inclusive, transparent, and responsive urban planning that reflects the lived realities of residents after dark.

Community-based efforts to collect data should not be an opposition to big data analytics but a complementary, key component to achieve a more comprehensive EBPM. On top of this approach, it is important to highlight that local governments and night-time governance stakeholders should also consider developing dedicated, human-rights based and responsible night-time data strategies. At the same time, proactively funding and supporting multiple ways to produce evidence through research, observatories, advocacy and community-driven and based data collection is a fundamental part of reimagining EBPM for the night.

CONCLUSION

Night-time governance does not escape the increasing demand for evidence in policymaking, especially as cities navigate persistent and new challenges. This paper presents an exploratory approach to what is or can be considered evidence in night-time governance and policymaking. The framework for evidence in 24-hour cities draws from four categories

[7] Notorious examples include “Queering the Map” (<https://www.queeringthemap.com/>) and the project “Mapping the Gay Guides”: <https://www.mappingthegayguides.org/methodology/>.

as guiding areas of key information: institutional mechanisms, qualitative research, data and multistakeholder engagement. These categories are not fixed and overlap at different moments, building upon an expansive notion of evidence used in night-time governance and policymaking. The framework is anchored on the argument that night-time governance needs various forms of evidence that engage multiple people, processes and institutions in policy- and decision-making. As data analytics and big data become more widely adopted and deployed under the guise of better governance, it is important to search for data sources that are underexplored, non-quantitative and collaborative.

Another central argument in this paper is that, in order to be truly effective, night-time governance should engage with citizen-generated data and qualitative research as solid foundations to EBPM. The complexity and nuances of the urban night is often better captured by communities, researchers, practitioners and residents. Expanding our EBPM also helps to promote long-term policy adaptability, especially when in dialogue with international networks dedicated to studying, improving and advocating for 24-hour cities. Relying on nocturnal communities and shared knowledge to appease the tensions between economic growth and residents' well-being is especially important for cities without robust night-time governance mechanisms, as in many Latin American and Global Majority cities.

Community-based efforts to collect data should not be an opposition to big data analytics but a complementary, key component to achieve a more comprehensive EBPM. On top of this approach, it is important to highlight that local governments and night-time governance stakeholders should consider developing dedicated, human-rights based and responsible night-time data strategies. The framework for evidence in urban night governance also offers different paths to collect information without imposing a one-size-fits-all, and considering the fact that access to safe and inclusive night-time spaces remains a challenge for historically marginalized communities that are often invisible to governments.

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