HOME-SHARING, RIDE-SHARING, AND DATA-SHARING: FOURTH AMENDMENT HURDLES FOR LOCAL GOVERNANCE OF THE SHARING ECONOMY

Matthew J. Disler

HOME-SHARING, RIDE-SHARING, AND DATA-SHARING: FOURTH AMENDMENT HURDLES FOR LOCAL GOVERNANCE OF THE SHARING ECONOMY

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Cities' attempts to regulate the sharing economy reveal a conflict between local governance interests and Fourth Amendment doctrine. Although sharing economy industries present local problems, from housing affordability and land-use regulations to traffic congestion and sidewalk safety, cities attempt to effectuate their policies through data reporting requirements that are vulnerable to Fourth Amendment challenge. Businesses have successfully argued that cities' reporting requirements are unconstitutional searches because they have an unreasonably broad scope and lack an opportunity for pre-compliance review.

This Article argues that this impasse results from recent developments that have lent additional confusion to the Fourth Amendment's administrative search doctrine. First, courts have increasingly focused on the scale of information demanded, rather than the relevance of that information to the government's purpose. Second, they have emphasized pre-compliance review without explaining what an opportunity for such review looks like for recurrent, discretion-less reports. Finally, they have narrowed the "closely regulated industry" exception by focusing on the perceived dangerousness of a regulated industry, rather than the pervasiveness of government regulation within that industry. The Article proposes solutions to contend with these changes and to clarify how cities can regulate the sharing economy without running afoul of Fourth Amendment interests.

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INTRODUCTION

Local governments face a new challenge in businesses' data collection activities.[1] On the one hand, this new information presents an opportunity for governance reforms. Cities have enacted surveillance ordinances and open data policies,[2] entered into data sharing agreements with private companies,[3] and established public-private partnerships to offer services to residents.[4] But privately collected data also presents uniquely local difficulties.

Consider firms in the sharing economy. Firms ranging from ride-hailing companies Uber and Lyft to the home-sharing platform Airbnb and the freelance labor marketplace TaskRabbit all collect troves of information from their users, from names to locations to behavior on their platforms.[5] As John Infranca and Nestor Davidson explain, these services are particularly prevalent and likely to flourish in cities, where merchants are located close to a large, dense population of potential clients.[6] Moreover, sharing economy companies' business models vary: they can own physical assets that customers use for a limited time, like the car rental company Zipcar, or provide a platform that enables peer-to-peer transactions, like Uber.[7]

Even the "sharing economy" moniker does not completely encompass all of the businesses that compile digital data on urban

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[1] *See* Ira S. Rubinstein & Bilyana Petkova, *Governing Privacy in the Datafied City*, 47 FORDHAM URB. L. J. 755, 759 (2020) (describing city use of data and technology).

[2] *See, e.g.*, Ira S. Rubinstein, *Privacy Localism*, 93 WASH. L. REV. 1961, 1986–99 (2018) (describing Seattle measures limiting data collection, establishing body camera requirements for police, and beginning open data initiative).

[3] Rubinstein & Petkova, *supra* note 2, at 809 (describing New York City and Boston's data-sharing agreements with bike-sharing companies).

[4] *See id.* at 799–800 (describing New York City's "LinkNYC" service).

[5] *See Uber Privacy Notice*, UBER, https://www.uber.com/legal/en/document/?country=united-states&lang=en&name=privacy-notice (last modified Apr. 1, 2021); *Lyft Privacy Policy*, LYFT, https://www.lyft.com/privacy (last modified Jan. 12, 2021); *Airbnb Privacy Policy*, AIRBNB, https://www.airbnb.com/terms/privacy_policy (last modified Oct. 30, 2020); *TaskRabbit Global Privacy Policy*, TASKRABBIT, https://www.taskrabbit.com/privacy (last updated Apr. 30, 2021).

[6] *See* Nestor M. Davidson & John J. Infranca, *The Place of the Sharing Economy*, *in* THE CAMBRIDGE HANDBOOK OF THE LAW OF THE SHARING ECONOMY 205, 207–08 (Nestor M. Davidson et al. eds. 2018); Nestor M. Davidson & John J. Infranca, *The Sharing Economy as an Urban Phenomenon*, 34 YALE L. & POL'Y REV. 215, 222–35 (2016).

[7] *See* Daniel E. Rauch & David Schleicher, *Like Uber, but for Local Government Law: The Future of Local Regulation of the Sharing Economy*, 76 OHIO ST. L.J. 901, 913–16 (2015).

residents. Journalists from the *New York Times*, for example, recently used a dataset of location information sent by mobile phones and collected by private companies to view the locations of over twelve million people. Using this data, they were able to track other journalists' movements and identify employees who attended job interviews at competing companies.[8]

A local government might seek access to some of this privately collected information to further policy aims. To start, many data-collecting businesses operate in areas traditionally regulated by local governments, like housing, hotel licensing, and transit.[9] They also create side effects at the local level.[10] Apartments removed from the rental market for home-sharing can constrain the housing stock and drive up rent prices.[11] Ride-hailing services can decrease public transit revenues, threatening the sustainability of public subways and buses.[12] Incumbent industries, like taxis or hotels, may worry that newcomers threaten their businesses.[13] A flush of scooters and bikes can crowd sidewalks, annoy pedestrians or drivers, or even cause injuries for riders and passersby.[14]

Despite these impacts, local data collection often operates in a legal grey area, hindering cities' ability to regulate the new industries. Though municipal codes historically created extensive requirements for hotels and taxis, the language of these laws do not clearly apply to short-term rental platforms (which argue that they are not hotels) or ride-hailing companies (which argue that they are not

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[8] Stuart A. Thompson & Charlie Warzel, *Twelve Million Phones, One Dataset, Zero Privacy*, N.Y. TIMES (Dec. 19, 2019), https://www.nytimes.com/interactive/2019/12/19/opinion/location-tracking-cell-phone.html

[9] *See* Davidson & Infranca, *The Sharing Economy as an Urban Phenomenon*, *supra* note 6, at 217.

[10] *See id.* at 239–41.

[11] *See* Dayne Lee, *How Airbnb Short-Term Rentals Exacerbate Los Angeles's Affordable Housing Crisis: Analysis and Policy Recommendations*, 10 HARV. L. & POL'Y REV. 229, 238–40, 243 (2016).

[12] *See* Davidson & Infranca, *The Place of the Sharing Economy*, *supra* note 6, at 208.

[13] *See* Rauch & Schleicher, *supra* note 7, at 904.

[14] *See* Peter Holley, *Pedestrians and E-Scooters Are Clashing in the Struggle for Sidewalk Space*, WASH. POST (Jan. 11, 2019), https://www.washingtonpost.com/business/economy/pedestrians-and-e-scooters-are-clashing-in-the-struggle-for-sidewalk-space/2019/01/11/4ccc60b0-0ebe-11e9-831f-3aa2c2be4cbd_story.html. For example, on August 18, 2020, customers filed a class-action suit against Lime, an e-scooter company, alleging product defects that caused rider injuries. *See* Maeve Allsup, *Riders Sue Lime Over Accidents Caused by Defective Scooters*, BLOOMBERG LAW (Aug. 18, 2020), https://www.bloomberglaw.com/document/X35BG8SS000000?bna_news_filter=us-law-week&jcsearch=BNA%25200000017403dfd40ba3fd3bdff1d80001#jcite.

taxis).[15] This ambiguity allows companies to avoid compliance with the laws by contending that the laws simply do not apply to new industries.[16] In response, cities have engaged in a burst of legislative and regulatory activity, crafting ordinances and extending regulations to data-collecting newcomers.[17]

This Article focuses on a central feature of these new laws: provisions that require the regulated businesses send data to city agencies. These data reporting requirements usually do not involve traditional warrants or subpoenas. Unlike one-off searches conducted after a showing of individualized suspicion, they are imposed on *all* businesses that participate in an industry and mandate information disclosures at regular intervals or continuously. To borrow from Daphna Renan's terminology in a related context, such local laws are a "programmatic" reporting scheme—an ongoing, regularized means for the government to access information.[18]

From a city's perspective, data reporting provisions serve local administrative ends: they provide a way for cities to gather information to address the localized challenges created by the entry of new technologies. Lawmakers rely on a stream of information in order to develop new policy solutions,[19] but industries like ride-hailing, home-sharing, food delivery, and vehicle rentals are often geographically dispersed, mobile, and difficult to detect using analog

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[15] *See* Davidson & Infranca, *The Sharing Economy as an Urban Phenomenon*, *supra* note 6, at 242–44; *see also* David Streitfeld, *Companies Built on Sharing Balk When It Comes to Regulators*, N.Y. TIMES (Apr. 21, 2014), https://www.nytimes.com/2014/04/22/business/companies-built-on-sharing-balk-when-it-comes-to-regulators.html (discussing arguments of sharing economy firms that existing regulations do not apply to them).

[16] *See* Victor Fleischer, *Regulatory Arbitrage*, 89 TEX. L. REV. 227, 229 (2010); Dave Rochlin, *When 'Innovation' Means Rule-Breaking*, L.A. TIMES (July 27, 2015), https://www.latimes.com/opinion/op-ed/la-oe-0727-rochlin-gray-market-20150727-story.html (explaining that some businesses "ignor[e] regulations that govern the existing market in pursuit of growth" and that venture capital firms funding these companies "can develop comparatively uncontested 'gray markets' by funding firms that operate in an unclear legal limbo, or simply declare that existing laws do not apply to these start-ups because their products, services and business models are new"); *see also* Davidson & Infranca, *The Sharing Economy as an Urban Phenomenon*, *supra* note 6, at 245–47 (explaining opportunities for regulatory arbitrage in the sharing economy and discussing potential benefits and costs of the approach).

[17] *See* Part I, *infra*.

[18] Daphna Renan, *The Fourth Amendment as Administrative Governance*, 68 STAN. L. REV. 1039, 1054–55 (2016).

[19] *See, e.g.*, Matthew C. Stephenson, *Information Acquisition and Institutional Design*, 124 HARV. L. REV. 1422, 1423 (2011) (observing that "many public decisions turn on some form of predictive judgment, such that a decisionmaker's choice does and should depend on the quality and content of the information available to her").

techniques. Data reporting requirements can provide the information necessary to craft new policies[20] and inform agencies about regulated businesses' compliance with local requirements.[21] They also offer more efficient means of information collection than alternative policies. Instead of recruiting and paying a corps of inspectors to ensure that businesses are following local rules, a strategy that can be prohibitively expensive, cities can acquire the same information by outsourcing the record-keeping task to regulated businesses.[22]

From the perspective of a sharing economy firm or its users, however, these data reporting provisions raise Fourth Amendment concerns. When the government demands access to a firm's information on customers, the firm may perceive that effort as an intrusion on its privacy—both because the government seeks business records and because of the extensive, detailed nature of the user data. In essence, businesses argue that while it may be acceptable for a home-sharing platform to determine customers' names, payment information, travel plans, and properties in exchange for using the platform, it is a different matter when the state, with all of its investigative and coercive power, gets involved. According to this view, the government's collection of sharing-economy data poses a threat to individuals' and firms' privacy and security in the same way that its collection of cell phones' location information does.[23]

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[20] *See* Cary Coglianese, Richard Zeckhauser & Edward Parson, *Seeking Truth for Power: Informational Strategy and Regulatory Policymaking*, 89 MINN. L. REV. 277, 281–85 (2004) (explaining regulators' need for information to inform policymaking choices).

[21] *See* Rory Van Loo, *The Missing Regulatory State: Monitoring Businesses in an Age of Surveillance*, 72 VAND. L. REV. 1563, 1574 (2019) (stating that monitoring involves "the collection of information that the agency can force a business to provide even without suspecting a particular act of wrongdoing").

[22] For example, Charleston, South Carolina formerly banned all home-sharing, enforcing its ordinance by designating a group of officers to conduct sting operations by posing as visitors on rental sites. This resulted in a regime that the city's mayor considered "basically unenforceable, or difficult to enforce." In 2018, the city amended its ordinance to permit short-term rentals in designated areas, and it hired additional officers to scrape data on home-sharing sites and monitor compliance. *See* Abigail Darlington, *Charleston Finally Lifts Ban on Short-Term Rentals, But the New Rules Are Strict*, POST & COURIER (Apr. 11, 2018), https://www.postandcourier.com/news/charleston-finally-lifts-ban-on-short-term-rentals-but-the/article_51d57ee2-3d00-11e8-aa86-23d8751580dc.html.

[23] *See* Carpenter v. United States, 138 S. Ct. 2206, 2217–19 (2018); *cf.* Anthony G. Amsterdam, *Perspectives on the Fourth Amendment*, 58 MINN. L. REV. 349, 358 (1974) (noting Fourth Amendment interests in privacy and security); Jed Rubenfeld, *The End of Privacy*, 61 STAN. L. REV. 101, 122 (2008) (arguing for Fourth Amendment doctrine based principally on protection of personal security, rather than privacy).

As a preliminary matter, the use of the Fourth Amendment to challenge a monitoring provision for local economic regulatory regimes might be incongruous. As Rory Van Loo has explained, federal administrative law often carves space for agencies to monitor businesses without individualized suspicion of wrongdoing, whether through on-site inspections or through reporting requirements.[24] Fourth Amendment objections are rare when Food and Drug Administration inspectors visit food processing facilities,[25] or when Environmental Protection Agency officials increase inspections of oil drilling platforms after an oil spill.[26] Yet privacy protections exist even for businesses subject to regulatory monitoring,[27] and while businesses may have accepted this low constitutional floor where federal law specifies an agency's responsibilities and powers, privacy-based objections have grown prominent in the more varied, unsettled areas of local law.

As a result, local data reporting laws have proven vulnerable to the legal challenge that they create unreasonable searches that violate the Fourth Amendment. This clash between local governance aims and purported privacy interests is the focus of this Article. Thus far, courts' conclusions in these disputes raise even more questions than they answer. In general, the government must have individualized suspicion, paradigmatically demonstrated through a warrant supported by probable cause, before conducting a search.[28] In its cases elaborating the "administrative search" doctrine, however, the Supreme Court has explained that a search is reasonable, and therefore constitutional, when it furthers a legitimate interest unrelated to law enforcement, has a properly delimited scope, and provides an opportunity for pre-compliance review.[29] For certain "closely regulated industries," the Court relaxes the requirements even further: a search does not require any individualized suspicion or opportunity for pre-compliance review, as long as an industry falls under the exception, warrantless inspections

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[24] *See* Van Loo, *The Missing Regulatory State*, *supra* note 21, at 1574–76; *see also* Rory Van Loo, *Regulatory Monitors: Policing Firms in the Compliance Era*, 119 COLUM. L. REV. 369, 371–75 (2019) (discussing role, ubiquity, and importance of regulatory monitors). For an example of a federal reporting requirement, see 33 U.S.C. § 1318 (2018) (mandating reporting for point source owners and operators under Clean Water Act).

[25] *See* Van Loo, *Regulatory Monitors*, *supra* note 24, at 372.

[26] *See id.* at 371.

[27] *See* Van Loo, *The Missing Regulatory State*, *supra* note 21, at 1583–84 (citing Marshall v. Barlow's, Inc., 436 U.S. 307, 321 (1978)).

[28] *See, e.g.*, Terry v. Ohio, 392 U.S. 1, 9–10 (1968) (discussing traditional warrant procedures and individualized suspicion requirements); Eve Brensike Primus, *Disentangling Administrative Searches*, 111 COLUM. L. REV. 254, 264 (2011) (noting "normal requirement" or "default rule" of individualized suspicion).

[29] *See* Section II.A, *infra*.

are "necessary" to achieve a "substantial" government interest,[30] business owners have notice that their industry is subject to suspicion-less inspections, and the law limits officers' discretion.[31]

Where do local data reporting requirements fall within this rubric? It might be possible to classify reporting under such laws as an administrative search or an administrative subpoena of business records, which courts generally analyze under the same framework.[32] But when faced with regulations of data-collecting industries, courts applying the administrative search doctrine focus on the sheer *scale* of information requested. This approach jeopardizes reporting requirements, because it ignores whether the data is relevant to the government purpose.[33] Similarly, the doctrine's requirement of an opportunity for pre-compliance review of a search could make reporting regimes that rely on regular or contemporaneous disclosures unworkable in practice.[34] Courts could seemingly resolve these challenges by extending the "closely regulated industry" exception, but they have avoided doing so.[35] Instead, beginning with Supreme Court's 2015 decision in *City of Los Angeles v. Patel*,[36] they have cabined this exception to instances where an industry poses a serious risk to public welfare, excluding new, data-intensive industries.[37]

Each of these problems can be resolved in a manner that is both sensitive to the local governance challenges posed by the sharing economy and faithful to Fourth Amendment interests. First, in determining whether the scope of a reporting requirement is appropriately limited, courts should ask whether the government has requested specific categories of information that are *relevant* to its legitimate purpose—not whether the scale of data is simply too large. Second, when faced with regularized reporting requirements that leave no discretion to on-the-ground officers, an opportunity for pre-compliance review need not be available before each reporting deadline, but rather before a businesses' first report. Finally, courts could extend the "closely regulated industry" analysis to sharing economy companies covered by local data reporting provisions.

This Article first describes the Fourth Amendment conflict and then addresses these possible paths forward. Part I discusses recent legal battles over local laws concerning home-sharing and

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[30] New York v. Burger, 482 U.S. 691, 702–03 (1987) (quoting Donovan v. Dewey, 452 U.S. 594, 600, 602 (1981)).

[31] *Donovan*, 452 U.S. at 603.

[32] *See* See v. City of Seattle, 387 U.S. 541, 544–45 (1967)).

[33] *See* Section III.A, *infra*.

[34] *See* Section III.B, *infra*.

[35] *See* Section III.C, *infra*.

[36] 576 U.S. 409 (2015).

[37] *See, e.g.*, *id.* at 424–26; Airbnb, Inc. v. City of New York, 373 F. Supp. 3d 467, 485 (S.D.N.Y. 2019).

micromobility industries,[38] which both set the stage for courts' and litigants' analyses of data reporting regimes and rest heavily on *Patel*. Part II traces the development of the administrative search doctrine and "closely regulated industry" exception, ending in a discussion of *Patel* and the open questions it creates in the context of the sharing economy. Part III proposes possible resolutions to these problems, and I then conclude.

I. FOURTH AMENDMENT CHALLENGES TO LOCAL REPORTING REQUIREMENTS

Local governmental interests motivate cities' data-reporting laws, but businesses that collect information on transactions, movement, properties, and users within city boundaries have contended that governmental attempts to regularly access data infringes on constitutional privacy rights. A 2016 decision by New York City's Taxi and Limousine Commission (TLC) decision to require ride-hailing companies to report pick-up locations, drop-off locations, and ride duration illustrates this tension.[39] Transit advocates and city planners explained that the location information would aid the city in understanding traffic patterns and areas where it could use its resources to mitigate congestion, improve roads, or extend public transit to underserved areas.[40] Ride-hailing companies opposed these regulations, arguing that they intruded on their customers' privacy and their own business records.[41] These claims proved unavailing, and the city's regulations became effective in 2019.[42] However, ride-hailing firms then employed the same

[38] I use the term "micromobility" to refer to businesses that rent small vehicles, such as e-scooters, bikes, and e-bikes, to users for a limited period of time. Such vehicles can also be "dockless," meaning that users can pick them up or drop them off in any location. *See, e.g.*, *Shared Mobility Services*, CITY OF AUSTIN, TEXAS, http://austintexas.gov/department/shared-mobility-services (last visited June 1, 2021).

[39] *See* Rubinstein & Petkova, *supra* note 2, at 805 (discussing rules codified at Rules of the City of New York tit. 35, ch. 78, § 21(e) (eff. Sept. 18, 2019)); Aarian Marshall, *The Secret Uber Data that Could Fix Your Commute*, WIRED (Feb. 3, 2017), https://www.wired.com/2017/02/ubers-coughing-data-nyc-fix-commute/ (same).

[40] *See* Marshall, *The Secret Uber Data that Could Fix Your Commute*, *supra* note 39; Alex Davies, *Uber's Mildly Helpful Data Tool Could Help Cities Fix Streets*, WIRED (Jan. 8, 2017), https://www.wired.com/2017/01/uber-movement-traffic-data-tool/.

[41] *See* Rubinstein & Petkova, *supra* note 2, at 805; Marshall, *The Secret Uber Data that Could Fix Your Commute*, *supra* note 39.

[42] *See* Aarian Marshall, *NYC Now Knows More Than Ever About Your Uber and Lyft Trips*, WIRED (Jan. 31, 2019), https://www.wired.com/story/nyc-uber-lyft-ride-hail-data/.

arguments to fight other local rules.[43] What if Uber had sued the TLC to block the rule? How would a court have balanced the city's interests in managing local transit challenges against a ride-hailing company's privacy arguments?

Reporting requirements directed at local data collectors have proven vulnerable to legal challenge on Fourth Amendment grounds. To demonstrate this clash, as well as courts' attempts to resolve the tension between local governance efforts and businesses' privacy claims, this Part discusses two of legal arenas where this conflict has played out: home-sharing and micromobility.

A. Home-sharing

With the introduction of home-sharing platforms like Airbnb,[44] cities faced one of their first legal conflicts between local governance challenges and privacy concerns. After cities passed ordinances that included reporting requirements, platforms brought legal challenges centered on their privacy rights in the data. Courts' resolutions of these disputes indicate their use of the Fourth Amendment as the dominant framework for analyzing local data reporting laws.

Home-sharing platforms connect "hosts" with "guests" to facilitate short-term rentals (STRs).[45] The host lists a property on the platform, providing details about location and accommodations; then, prospective guests browse through listings of available properties until selecting a property. If both parties choose to proceed with a short-term rental, the platform collects a fee on the transaction.[46]

Local governments and advocates have sought to regulate home-sharing for at least four reasons. First, a proliferation of STRs

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[43] *See, e.g.*, Martin Austermuhle, *Uber and Lyft Push Back Against D.C. Council Demand for Data, Citing Privacy Concerns*, WAMU (May 24, 2018), https://wamu.org/story/18/05/24/uber-lyft-push-back-d-c-council-demand-data-citing-privacy-concerns/#.XHljZFM3nLY (discussing ride-hailing companies' opposition to proposed Washington, D.C. data-sharing provision); Grace Dobrush, *Uber Has Troves of Data on How People Navigate Cities. Urban Planners Have Begged, Pleaded, and Gone to Court for Access. Will They Ever Get It?*, MARKER (Sept. 9, 2019), https://marker.medium.com/ubers-real-advantage-is-data-e54984ff524c (discussing Uber's legal dispute with San Francisco over data sharing and the city's subpoena for information).

[44] *See About Us*, AIRBNB, https://news.airbnb.com/about-us/ (last visited June 1, 2021).

[45] *See* Aaron Smith, *Shared: Home-Sharing Services*, PEW RSCH. CTR. (May 19, 2016), https://www.pewresearch.org/internet/2016/05/19/shared-home-sharing-services/ (explaining that home-sharing platforms match potential customers to those willing to rent out space).

[46] *See* Lee, *supra* note 11, at 232 (describing Airbnb business model); Erika Rawes & Kailla Coomes, *What Is Airbnb? What to Know Before Becoming a Guest or Host*, DIGITAL TRENDS (Sept. 13, 2019), https://www.digitaltrends.com/home/what-is-airbnb/ (same).

may affect neighborhood character by replacing permanent residents with transient guests; accordingly, neighbors may become irritated at the arrival of strangers and dismayed at the loss of neighborhoods' historic character.[47] In some cases, these annoyances can escalate, with residents complaining of "party houses" rented out to revelers.[48]

Second, governments may also be concerned that the legal requirements it had imposed on the lodging industry will not apply to the hosts and guests in STRs. For instance, the movement of guests from traditional hotels to STRs will shrink the income received from transient occupancy taxes, or taxes collected for temporary lodgers. The lodging industry is also subject to a range of health and safety regulations, from fire codes to sanitation rules, that do not apply to private homes, and governments may want these requirements to apply to STRs.[49] Incumbents—hotels, motels, and lodging associations—may also oppose home-sharing and argue that they are unfairly evading the legal requirements that apply to the rest of the lodging industry.[50]

Third, critics have argued that home-sharing platforms exacerbate inequality by contributing to shortages of long-term housing.[51] For example, one analysis of STRs' effects on the Los

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[47] *See* Benjamin G. Edelman & Damien Geradin, *Efficiencies and Regulatory Shortcuts: How Should We Regulate Companies Like Airbnb and Uber*, 19 STAN. TECH. L. REV. 293, 313 (2016); Stephen R. Miller, *First Principles for Regulating the Sharing Economy*, 53 HARV. J. ON LEGIS. 147, 182–84 (2016); Rauch & Schleicher, *supra* note 7, at 921.

[48] *See, e.g.*, Howard Fischer, *Arizona Bill Aims to Curb Neighborhood "Party House" Rentals*, ARIZ. DAILY STAR (Mar. 8, 2019), https://tucson.com/news/local/arizona-bill-aims-to-curb-neighborhood-party-house-rentals/article_fa8d5bf1-a7b0-5719-8ef1-f6ca24ee51ff.html; Steven Luke, *Short Term Rental 'Party House' Draws Rare Legal Action*, NBC 7 SAN DIEGO (Aug. 7, 2020), https://www.nbcsandiego.com/news/local/short-term-rental-party-house-draws-rare-legal-action/2381133/. In December 2019, Airbnb announced that it would ban unauthorized parties in properties listed on the platform. *See* Tyler Sonnemaker, *Airbnb Bans Party Houses, Says Guests Who Violate House Rules Can Be Kicked Off Platform*, BUS. INSIDER (Dec. 5, 2019), https://www.businessinsider.com/airbnb-bans-party-houses-guests-can-be-removed-for-violations-2019-12.

[49] *See The Sharing Economy: Remove the Roadblocks*, ECONOMIST (Apr. 26, 2014), https://www.economist.com/leaders/2014/04/26/remove-the-roadblocks (noting health, tax, and fire safety laws that govern traditional hotels but may not apply to STRs).

[50] *See, e.g.*, Olivia Carville et al., *Airbnb to America's Big Cities: See You in Court*, BLOOMBERG (Feb. 14, 2020), https://www.bloomberg.com/graphics/2020-airbnb-ipo-challenges/ (discussing hotel industry opposition); Rauch & Schleicher, *supra* note 7, at 932 (same); *see also* Roberta A. Kaplan & Michael L. Nadler, *Airbnb: A Case Study in Occupancy Regulation and Taxation*, 82 U. CHI. L. REV. DIALOGUE 103, 108 (2015-2016) (criticizing hotel industry opposition).

[51] Rauch & Schleicher, *supra* note 7, at 921.

Angeles housing market observed that as landlords were incentivized to offer their properties as STRs, they removed homes from the permanent housing market, driving up prices and limiting stock.[52] In regions with limited housing, this dynamic might force out lower-income renters.[53]

Finally, some have also argued that home-sharing platforms can facilitate racial discrimination.[54] In 2015, researchers at Harvard Business School found that applications from guests with distinctively African-American names were sixteen percent less likely to be accepted by Airbnb hosts than applications from guests with distinctively white names.[55] Though Airbnb acknowledged the problem and took steps to address it,[56] by 2018 some of the initial study's researchers documented the issue's persistence.[57]

In an effort to address some of these challenges, local governments have turned to their land-use authority to impose various requirements on home-sharing platforms and STR hosts.[58] Although the content of these ordinances vary, they generally share several components. For example, many cities impose geographic limits by restricting STRs to certain neighborhoods,[59] or setting more stringent requirements for STRs in areas zoned for residential, rather

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[52] *See* Lee, *supra* note 11, at 234–35; *see also* JANE PLACE NEIGHBORHOOD SUSTAINABILITY INITIATIVE, SHORT-TERM RENTALS, LONG TERM IMPACTS: THE CORROSION OF HOUSING ACCESS AND AFFORDABILITY IN NEW ORLEANS 5 (2018), https://storage.googleapis.com/wzukusers/user-27881231/documents/5b06c0e681950W9RSePR/STR%20Long-Term%20Impacts%20JPNSI_4-6-18.pdf (discussing similar effects in New Orleans).

[53] *See* Lee, *supra* note 11, at 240; JANE PLACE, *supra* note 52, at 19–23.

[54] *See* Brenna R. McLaughlin, Comment, *#AirbnbWhileBlack: Repealing the Fair Housing Act's Mrs. Murphy Exemption to Combat Racism on Airbnb*, 2018 WIS. L. REV. 149, 161–63 (2018).

[55] *See* Benjamin Edelman, Michael Luca, & Dan Svirksy, *Racial Discrimination in the Sharing Economy: Evidence from a Field Experiment*, 9 AM. ECON. J.: APPLIED ECON. 1, 2 (2017), https://doi.org/10.1257/app.20160213.

[56] *See* Laura W. Murphy, Airbnb's Work to Fight Discrimination and Build Inclusion: A Report Submitted to Airbnb (Sept. 8, 2016), https://blog.atairbnb.com/wp-content/uploads/2016/09/REPORT_Airbnbs-Work-to-Fight-Discrimination-and-Build-Inclusion_09292016.pdf.

[57] *See* Ben Edelman & Jessica Min, *Updated Research on Discrimination at Airbnb*, BEN EDELMAN BLOG (May 13, 2018), http://www.benedelman.org/updated-research-on-discrimination-at-airbnb/ (collecting studies).

[58] Courts have long recognized that local governments may regulate land use. *See* Vill. of Euclid v. Ambler Realty Co., 272 U.S. 365, 389–90 (1926).

[59] New Orleans Ordinance No. 28156, § 14 (June 6, 2019) (codified at New ORLEANS COMPREHENSIVE ZONING ORDINANCE § 20.3.LLL.1(i) (2020)), http://www.nola.gov/nola/media/311/STR-CZO-MCS_1.pdf (prohibiting STRs in specific neighborhoods).

than commercial, use.[60] Cities may also create time restrictions, limiting the number of days that a property may be rented out each year,[61] or mandating that a property rented out as an STR be an owner's primary residence.[62] They may also impose health and safety regulations, such as installing carbon monoxide detectors and fire extinguishers,[63] and set limits on loud noises, events, or large group stays.[64] Finally, since local governments often attempt to collect transient occupancy taxes for guests' stays in traditional hotels and motels, they often attempt to extend these taxes to STR guests.[65] These provisions often mirror provisions that apply to traditional hotels; for example, hotels must install fire safety

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[60] *See, e.g.*, New Orleans Ordinance No. 28156, § 14 (June 6, 2019) (codified at NEW ORLEANS COMPREHENSIVE ZONING ORDINANCE §§ 20.3.LLL.1–2 (2020)), http://www.nola.gov/nola/media/311/STR-CZO-MCS_1.pdf (requiring that in residential neighborhoods STRs must not "adversely affect the residential character of the neighborhood" and must have "[p]roof of owner occupancy," while commercial STRs must develop impact management plans and cap number of available units at 25 percent.).

[61] *See, e.g.*, L.A. Ordinance No. 185,931, § 6 (Dec. 17, 2018) (codified at L.A., CAL., MUN. CODE § 12.22(A)(32)(d)(3) (2020)), https://codelibrary.amlegal.com/codes/los_angeles/latest/lapz/0-0-0-6561 (providing that "No Host shall engage in Home-Sharing for more than 120 days in any calendar year unless the City has issued the Host an Extended Home-Sharing registration . . . .").

[62] *See, e.g.*, S.F. ADMIN. CODE § 41A.5(g)(1)(A) (2020), https://codelibrary.amlegal.com/codes/san_francisco/latest/sf_admin/0-0-0-27937#rid-0-0-0-27965 (permitting a "Permanent Resident" to rent a unit as short-term rental only if the Permanent Resident "occupies the [unit] for no less than 275 days out of the calendar year").

[63] *See, e.g.*, Denver Council Bill No. CB20-0240, § 1 (Apr. 1, 2020) (codified at DENVER MUN. CODE § 33-49(a) (2020)), https://www.denvergov.org/content/dam/denvergov/Portals/723/documents/STR_Signed_Bill_2020.pdf ("It shall be unlawful to operate a short-term rental without a functioning smoke detector, carbon monoxide detector, and fire extinguisher on the licensed premises.").

[64] *See, e.g.*, CODE OF THE METRO. GOV'T OF NASHVILLE AND DAVIDSON CTY., TENN., § 6.28.030(A)(5)(f), (B)(5)(f) (2021), https://library.municode.com/tn/metro_government_of_nashville_and_davidson_county/codes/code_of_ordinances?nodeId=CD_TIT6BULIRE_DIVIGERE_CH6.28HORO_6.28.030SHTEREPRPE (setting occupancy limits); CODE OF THE CITY OF CHARLOTTESVILLE, VA., § 34-1172(3) (2020), https://library.municode.com/va/charlottesville/codes/code_of_ordinances?nodeId=CO_CH34ZO_ARTIXGEAPRE_DIV9STPRUS_S34-1172STOMOC (setting occupancy limits); L.A. Ordinance No. 185,931, § 6 (Dec. 17, 2018) (codified at L.A., CAL., MUN. CODE § 12.22(A)(32)(d)(12) (2020)), https://codelibrary.amlegal.com/codes/los_angeles/latest/lapz/0-0-0-6561 (applying noise regulations and limiting use of sound amplifying equipment and large gatherings of STRs).

[65] *See, e.g.*, Santa Monica Ordinance No. 2616, § 1 (Sept. 24, 2019) (codified at SANTA MONICA MUN. CODE § 6.20.020 (a) (3) (2020), https://www.smgov.net/uploadedFiles/Departments/PCD/Permits/Home%20share%20O-2616.pdf (applying transient occupancy tax to STRs).

equipment, account for transient occupancy taxes, and only offer services in areas zoned for commercial use.[66]

These home-sharing ordinances face an enforcement challenge: because STRs are often indistinguishable from normal residences, local governments cannot easily determine which requirements apply to which properties.[67] Without the ability to identify STRs, a city's policy becomes dependent on neighbor reports, expensive and inefficient police inspections, or the goodwill of private STR owners, all of which can lead to inconsistent enforcement.[68]

Cities attempt to overcome this hurdle through data reporting provisions. Local ordinances often include host registration requirements: for owners to offer their properties as an STR, they must obtain a license and indicate their registration information when listing their unit on a platform.[69] A platform must then ensure that all of the listed properties are registered and prevent transactions if they are not listed.[70] Additionally, some cities have begun to require

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[66] *See* Angelo Verzoni, *The Airbnb Challenge*, NAT'L FIRE PROT. ASS'N J. (July-Aug. 2018), https://www.nfpa.org/News-and-Research/Publications-and-media/NFPA-Journal/2018/July-August-2018/Features/The-Airbnb-Challenge (describing application of fire and safety regulations to STRs in some cities); Paris Martineau, *Inside Airbnb's 'Guerrilla War' Against Local Governments*, WIRED (Mar. 20, 2019), https://www.wired.com/story/inside-airbnbs-guerrilla-war-against-local-governments/ (describing governments' attempts to extend transient occupancy tax responsibility to STRs).

[67] Declaration of Christian Klossner in Opposition to Plaintiffs' Motions for a Preliminary Injunction at 29–33, Airbnb, Inc. v. City of New York, 373 F. Supp. 3d 467 (S.D.N.Y. 2019) (No. 1:18-cv-07712) [hereinafter "Klossner Declaration"].

[68] *See* Tess Hofmann, Note, *Airbnb in New York City: Whose Privacy Rights Are Threatened by a Government Data Grab?*, 87 FORDHAM L. REV. 2589, 2596–97 (2019).

[69] *See, e.g.*, Boston Ordinance of June 13, 2018 (codified at BOS. MUN. CODE § 9.14.6(a) (2019), https://codelibrary.amlegal.com/codes/boston/latest/boston_ma/0-0-0-1899#rid-0-0-0-17770); Denver Council Bill No. CB20-0240, § 1 (Apr. 1, 2020) (codified at DENVER MUN. CODE § 33-47 (2020)), https://www.denvergov.org/content/dam/denvergov/Portals/723/documents/STR_Signed_Bill_2020.pdf; CODE OF THE METRO. GOV'T OF NASHVILLE AND DAVIDSON CTY., TENN., § 17.16.250(E) (2020), https://library.municode.com/tn/metro_government_of_nashville_and_davidson_county/codes/code_of_ordinances?nodeId=CD_TIT17ZO_CH17.16LAUSDEST_ARTIVUSPEACA_17.16.250REACUS.

[70] *See, e.g.*, S.F. ADMIN. CODE § 41A.5(g)(4)(C) (2020), https://codelibrary.amlegal.com/codes/san_francisco/latest/sf_admin/0-0-0-27937#rid-0-0-0-27965; Santa Monica Ordinance No. 2616, § 1 (Sept. 24, 2019) (codified at SANTA MONICA MUN. CODE § 6.20.050(b)–(c) (2020), https://www.smgov.net/uploadedFiles/Departments/PCD/Permits/Home%20share%20O-2616.pdf. Home-sharing platforms have also argued that provisions requiring them not to process transactions for unregistered properties violated Section 230 of the Communications Decency Act, 47 U.S.C. § 230 (2018),

platforms to disclose information about listed units. Santa Monica's home-sharing ordinance provides one example: it requires platforms to regularly disclose each listing within city limits, the names of the property owners associated with the listing, the address of the listing, the length of stay for each listing, and the price paid.[71] Portland, Oregon requires platforms to disclose similar information upon receiving a request from the city's revenue division or a subpoena from another agency.[72] Other cities that have enacted reporting requirements include New Orleans, Chicago, and San Francisco.[73]

Home-sharing platforms have challenged several of these ordinances on the grounds that they impact both users' and their own privacy rights.[74] They draw on two sources of law to do so: the Stored Communications Act (SCA)[75] and the Fourth Amendment. But while cities have easily defeated SCA claims,[76] platforms have prevailed by arguing that data-sharing requirements are unreasonable searches under the Fourth Amendment both in terms of their scope and their absence of opportunities for platforms to obtain pre-compliance review of the mandated disclosures.

In *Airbnb, Inc. v. City of New York*,[77] for example, the court issued a preliminary injunction against New York City's reporting requirement on Fourth Amendment grounds even though it had rejected the platforms' SCA arguments. As the lead decision

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because they imposed liability on platforms for the content published by third parties. Section 230 generally allows online companies to avoid liability arising from "any information provided by another information content provider. 47 U.S.C. § 230(c)(1) (2018). Courts that have addressed this question so far have held that a provision preventing a platform from processing a transaction does not punish the platform for its users' content, and thus does not implicate the statute. *See* HomeAway.com, Inc. v. City of Santa Monica, 918 F.3d 676, 682–84 (9th Cir. 2019); Airbnb, Inc. v. City & Cty. of San Francisco, 217 F. Supp. 3d 1066, 1073, 1076 (N.D. Cal. 2016).

[71] Santa Monica Ordinance No. 2616, § 1 (Sept. 24, 2019) (codified at SANTA MONICA MUN. CODE § 6.20.050(b) (2020), https://www.smgov.net/uploadedFiles/Departments/PCD/Permits/Home%20share%20O-2616.pdf.

[72] *See* CODE OF THE CITY OF PORTLAND, OR., § 6.04.040(B) (2020), https://www.portlandoregon.gov/citycode/28805#cid_738498.

[73] *See* Hofmann, *supra* note 68, at 2599–600 (discussing reporting requirements in several cities).

[74] *See* Airbnb, Inc. v. City of Boston, 386 F. Supp. 3d 113 (D. Mass. 2019); Airbnb, Inc. v. City of New York, 373 F. Supp. 3d 467, 498 (S.D.N.Y. 2019).

[75] 18 U.S.C. §§ 2701–2711 (2018).

[76] *See Airbnb v. Boston*, 386 F. Supp. at 124; *Airbnb v. New York*, 373 F. Supp. 3d at 496–97; Homeaway.com, Inc. v. City of Santa Monica, No. 216CV06641ODWAFM, 2018 WL 3013245, at *8 (C.D. Cal. June 14, 2018), *aff'd*, 918 F.3d 676 (9th Cir. 2019).

[77] *See* Airbnb, Inc. v. City of New York, 373 F. Supp. 3d 467 (S.D.N.Y. 2019).

analyzing data-reporting requirements under the Fourth Amendment, the court's reasoning illustrates the current judicial approach to these local reporting requirements.[78]

The decision concerned an ordinance designed to enforce short-term rental laws in New York City.[79] State legislation in 2010 had outlawed short-term rentals of units in class A multiple dwellings, a category that includes most apartments, without the owner present,[80] and a 2016 amendment added a prohibition on owners advertising their units as short-term rentals.[81] Yet New York City still faced enforcement problems, with the city receiving about 1,900 complaints relating to STRs that violated these statutes by 2017.[82] Although the city's Office of Special Enforcement also ramped up its investigation activity, often relying on door-to-door visits and neighbor reports, the STR market quickly outstripped its enforcement capacity.[83]

In order to address this enforcement challenge, the New York City Council passed Local Law 146.[84] The ordinance required each "booking service" to submit a monthly report of all transactions to the city, including the STR's physical address; the name and contact information of hosts, as well as the URL and individualized name and number for the host on the platform; the individualized name, number, and URL of the listing; a statement identifying whether the transaction involved all or part of the unit; the total number of days rented, fees received by the booking service, and rent collected and transmitted to the host; and the account information used to transfer

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[78] *See Airbnb v. Boston*, 386 F. Supp. 3d at 125 (relying on *Airbnb v. New York* to partially enjoin reporting provision in ordinance).

[79] Hofmann, *supra* note 68, at 2596–98 (discussing context of STR enforcement challenges in which ordinance was enacted).

[80] S.B. 6873, 2009 Leg., 234th Sess., § 1 (N.Y. 2010) (amending N.Y. MULT. DWELLING LAW § 4(8)(a)). City law also prohibits short-term rentals of multiple dwelling units and one- or two-family units that are occupied for permanent residence purposes. *See* Airbnb, Inc. v. City of New York, 373 F. Supp. 3d 467, 474 (S.D.N.Y. 2019) (discussing New York City's short-term rental laws).

[81] Assemb. B. 8704, 2015 Leg., 238th Sess., §§ 1–2 (N.Y. 2016) (adding advertising prohibitions); *see also* J. T. Minor, Note, *Foregoing the Cleaver for the Scalpel: How New York Can Add Some Nuance to Its Short-Term Rental Laws*, 103 IOWA L. REV. 817, 821–24 (2018) (discussing passage of New York State statutes).

[82] Klossner Declaration, *supra* note 67, at ¶ 10.

[83] *See* Hofmann, *supra* note 68, at 2596–97; *see also* Klossner Declaration, *supra* note 67, at 10, 16 (discussing OSE's enforcement activity and lawsuits filed to enforce multiple dwelling statutes).

[84] *See* Klossner Declaration, *supra* note 67, Exhibit G, at 2–3 (stating that purpose of ordinance was "to further address the adverse effect, well-documented by a number of reports issued and studies conducted by both governmental and non-governmental organizations, resulting from conversion of permanent housing to rentals under 30 days, despite the 2010 and 2016 legislative amendments to the Multiple Dwelling Law. . . .").

the rent to the host.[85] Airbnb and HomeAway sued to enjoin enforcement of Local Law 146, moving to preliminarily enjoin the ordinance days later.[86]

In deciding to grant the preliminary injunction, Judge Engelmayer first determined that the Fourth Amendment applied to the ordinance because the platforms had a reasonable expectation of privacy in the requested information.[87] Treating the data as a business record, the court concluded that the Fourth Amendment applied under the logic of the Ninth Circuit decision upheld in *Los Angeles v. Patel*, which held that hotel owners have a reasonable expectation of privacy in their guests' records;[88] so too do home-sharing platforms have a reasonable expectation of privacy in users' information.[89] Though he acknowledged that businesses in "closely regulated industries" have diminished expectations of privacy,[90] he found no "comparable history of close regulation" of the hospitality or home-sharing industries, a conclusion that he buttressed with the Supreme Court's holding in *Patel* that the hospitality industry did not fall under the "closely regulated industry" exception.[91]

Second, the court held that Local Law 146 likely violated "the Fourth Amendment's central command . . . that official searches and seizures be reasonable."[92] It began by examining two related lines of Supreme Court precedent: decisions regarding agencies' civil subpoenas for business records, and those concerning administrative searches, in which the government establishes inspection regimes for purposes other than to search for evidence of a crime.[93] In such non-criminal contexts, Judge Engelmayer explained, the traditional warrant and probable cause requirements are relaxed.[94] Instead, courts look to whether: (a) the administrative scheme is "sufficiently limited in scope, relevant in purpose, and

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[85] Klossner Declaration, *supra* note 67, Exhibit G, at 6–8 (adding CODE OF THE CITY OF NEW YORK § 26-2102(a)); *see also* Airbnb, Inc. v. City of New York, 373 F. Supp. 3d 467, 474–75 (S.D.N.Y. 2019) (citing ordinance's reporting requirements).

[86] *See* Airbnb, Inc. v. City of New York, 373 F. Supp. 3d 467, 476 (S.D.N.Y. 2019).

[87] *Id.* at 482.

[88] *See* Patel v. City of Los Angeles, 738 F.3d 1058, 1061 (9th Cir. 2013) (en banc), *aff'd sub nom.* City of Los Angeles v. Patel, 576 U.S. 409 (2015).

[89] *Airbnb v. New York*, 373 F. Supp. 3d at 483–484 (citing *Patel*, 738 F.3d at 1061).

[90] *See id.*, 373 F. Supp. 3d at 485.

[91] *Id.* (citing *Patel*, 576 U.S. at 424–28).

[92] *Id.* at 486; *see also id.* at 494 (holding that searches created by the ordinance are likely unreasonable).

[93] *Id.* at 487.

[94] *See id.* at 486–87 (explaining that when considering agency subpoenas and administrative searches, the Supreme Court "has not insisted on the procedures described by the Warrant Clause").

specific in directive so that compliance will not be unreasonably burdensome";[95] (b) the government's interest is unrelated to law enforcement;[96] and (c) there is an equivalent procedural safeguard that takes the place of a warrant.[97]

Judge Engelmayer, again relying on *Patel*, found Local Law 146 deficient in all three respects. In terms of scope, he explained that "[i]n its sweep, [Local Law 146] dwarfs that of the Los Angeles ordinance at issue in *Patel*."[98] The ordinance applied across the board, to all STRs, for an indefinite period of time; in the court's eyes, it was equivalent to an order that OSE issue a subpoena every month without any tailoring.[99] Given this sweep, the city's proffered interest—"facilitat[ing] OSE's enforcement efforts" to stop illegal STRs—simply revealed that the city's interest was crime control, which was insufficient to justify a warrantless reporting regime.[100] Finally, the ordinance lacked an opportunity for platforms to obtain pre-compliance review: it provided no neutral forum for companies or hosts to challenge reporting requirements or penalties for noncompliance.[101]

In sum, the *Airbnb v. New York* court relied on *Patel* to extend the scope, governmental purpose, and procedural requirements of administrative searches to the context of local data reporting requirements. Focusing mostly on the scope of the reporting provision in the New York City ordinance and the "scale of the user data compelled to be produced," the court concluded that the search was likely unreasonable.[102] Though the parties settled the dispute more than a year later,[103] the court's analysis proved influential in other cases implicating home-sharing platforms,[104] as well as in other disputes over local data collectors such as micromobility companies.

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[95] *See id.* at 488 (quoting See v. City of Seattle, 387 U.S. 541, 544 (1967)).

[96] *See id.* at 487 (quoting Michigan v. Tyler, 436 U.S. 499, 511–12 (1978)).

[97] *See id.* at 489 (quoting *Patel*, 576 U.S. at 420–21).

[98] *Id.* at 491. The ordinance in *Patel* required hotel owners to keep and report records of guests' names, addresses, party size, car information, date and time of arrival, room number and payment information. *See Patel*, 576 U.S. at 412–13.

[99] *Airbnb v. New York*, 373 F. Supp. 3d at 491.

[100] *Id.* at 491–92.

[101] *Id.* at 493–94.

[102] *Id.* at 494.

[103] *See* Settlement and Release Agreement, Airbnb, Inc. v. City of New York, Case No. 1:18-cv-07712-PAE (S.D.N.Y. June 12, 2020).

[104] *See, e.g.*, Airbnb, Inc. v. City of Boston, 386 F. Supp. 3d 113, 125 (D. Mass. 2019) (citing *Airbnb v. New York*, 373 F. Supp. 3d at 480–96).

B. Micromobility

Just as local governments' interests in data-sharing requirements clashed with the regulated entities' Fourth Amendment arguments in the home-sharing context, a similar tension emerged with the arrival of micromobility vehicles, like e-scooters and bicycles, on city streets and sidewalks.[105] Unlike home-sharing or ride-hailing platforms, micromobility businesses do not work as intermediaries between owners and customers, because the businesses generally own the vehicles that users ride.[106] However, like Airbnb and HomeAway, they rely heavily on collecting data from users.

Micromobility also implicates local governance concerns. As the Los Angeles Department of Transportation (LADOT) argued after unveiling the Mobility Data Specification (MDS), a digital data collection tool,[107] it anticipated that micromobility data would serve a range of purposes, like helping provide transportation to low-income residents, determining whether companies were abiding by local rules, and ensuring that scooters were not blocking sidewalks.[108] And, as in the case of other sharing economy industries, cities lacked a means of knowing where vehicles were located without some

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[105] *See* Ben Kelman, Derek M. Pankratz, & Rasheq Zarif, *Small Is Beautiful: Making Micromobility Work for Citizens, Cities, and Service Providers*, DELOITTE INSIGHTS (Apr. 16, 2019), https://www2.deloitte.com/us/en/insights/focus/future-of-mobility/micro-mobility-is-the-future-of-urban-transportation.html (including "[e]lectric scooters, docked and dockless shared bikes, and other vehicle types" under heading of "micromobility" and observing that the concept can be framed as "forms of transport that can occupy space alongside bicycles").

[106] *Cf. id.* (contrasting micromobility businesses with ride-sharing services because while the latter are "based on privately owned full-sized cars, [micromobility] vehicles are small, light, and typically owned by the micromobility provider").

[107] *See FAQs*, OPEN MOBILITY FOUNDATION, https://www.openmobilityfoundation.org/faq/ (last visited June 1, 2021) (stating that MDS "is comprised of a set of Application Programming Interfaces (APIs) that create standard communications between cities and private companies to improve their operations"); David Zipper, *Cities Can See Where You're Taking that Scooter*, SLATE (Apr. 2, 2019), https://slate.com/business/2019/04/scooter-data-cities-mds-uber-lyft-los-angeles.html (explaining that LADOT released the first version of MDS in 2018).

[108] *See* Beatriz Botero Arcila, Jump v. Los Angeles*: Removing Platforms Further From Democratic Control?*, 68 U.C.L.A. L. REV. DISC. 160, 165 (2020); *see also* Complaint at ¶ 2, Sanchez v. L.A. Dep't of Transp., No. 2:20-CV-05044 (C.D. Cal. June 8, 2020) [hereinafter "Sanchez Complaint"] (explaining that dockless scooters "cluttered city sidewalks, lacked safety features, and interfered with disabled access to city streets").

means of tracking them—particularly for "dockless" bikes and scooters that could be picked up and dropped off anywhere.[109]

MDS consists of three application programming interfaces (APIs), or tools that allow servers to send requests and receive information. Two of these allow the city to access trip data: the "Provider API" allows a public agency to request historical trip data from companies, and the "Agency API" sends companies' real-time trip data automatically to the agency.[110] The information collected includes a unique device identifier for each vehicle; the type of vehicle; the company name; and the start point, end point, and length and route of each trip.[111] Cities collect this location data from GPS information that can usually place a vehicle within a few dozen feet.[112] The "Policy API" enables agencies to send information, new policies, and updates to companies.[113]

LADOT decided to require dockless mobility businesses to incorporate MDS and participate in its data-sharing as a condition to operating in Los Angeles.[114] Over fifty cities throughout the country have adopted the standard,[115] and LADOT moved administration of MDS to a new public-private group called the Open Mobility

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[109] *See* Zipper, *supra* note 107 (quoting Los Angeles Department of Transportation general manager Seleta Reynolds as explaining that when working in San Francisco during the rise of ride-sharing, that city's regulatory efforts were hindered by its inability to access data); Andrew J. Hawkins, *US Cities Are Joining Forces to Figure Out What the Hell to Do With All These Scooters*, VERGE (June 25, 2019), https://www.theverge.com/2019/6/25/18715977/electric-scooter-sharing-cities-us-bird (stating that "[s]cooter sharing caught cities flat-footed. This is not in dispute.").

[110] *See Mobility Data Specification*, GITHUB, https://github.com/openmobilityfoundation/mobility-data-specification (last visited June 1, 2021) (describing all three APIs); Zipper, *supra* note 107 (describing Provider API and Agency API).

[111] Sanchez Complaint, *supra* note 108, at ¶ 25.

[112] *Id.* at ¶ 30.

[113] *Mobility Data Specification*, GITHUB, https://github.com/openmobilityfoundation/mobility-data-specification (last visited June 1, 2021).

[114] *See* Aarian Marshall, *Why Uber Is Fighting Cities Over Data on Scooter Trips*, WIRED (May 13, 2019), https://www.wired.com/story/why-uber-fighting-cities-data-about-scooters/ (describing LADOT's requirement that scooter operators share data with city through MDS); Complaint for Injunctive & Declaratory Relief at ¶¶ 47, 77, Social Bicycles d/b/a Jump v. City of Los Angeles, No. 2:20-CV-02746 (C.D. Cal Mar. 24, 2020) [hereinafter "Jump Complaint"] (noting that LADOT permits required compliance with MDS).

[115] *See* Hawkins, *supra* note 109 (reporting that over fifty cities in the United States have adopted MDS); *see also* Zipper, *supra* note 107 (stating that Seattle, San Jose, Austin, Santa Monica, Providence, and Louisville have adopted MDS); *see also* Andrew J. Hawkins, *The ACLU Is Suing Los Angeles Over Its Controversial Scooter Tracking System*, VERGE (June 8, 2020), https://www.theverge.com/2020/6/8/21284490/aclu-ladot-mds-lawsuit-scooter-tracking-uber (adding Columbus, Chattanooga, and Omaha to list of adopters).

Foundation.[116] However, several companies involved in dockless mobility, such as Uber, Lyft, and Bird, publicly opposed MDS.[117] Joined by advocacy groups like the Center for Democracy and Technology and the Electronic Frontier Foundation, they argued that granular geolocation data is easily identifiable even if MDS does not require reporting the names of users.[118]

In March 2019, LADOT proposed a set of "Data Protection Principles" designed to assuage these concerns.[119] Among other things, the principles included an access limitation to prevent LADOT from sharing MDS data with law enforcement agencies, as well as a provision indicating that the city would attempt to minimize information it collected.[120] Critics responded that these principles were non-binding and continued to permit the agency to collect the information that had drawn opposition in the first place, namely, granular geolocation data.[121]

The conflict came to a head in two lawsuits that introduced similar Fourth Amendment arguments. First, Jump, an e-bike and scooter company then owned by Uber,[122] challenged MDS after LADOT suspended its permit for failure to comply with its data-reporting requirements.[123] After losing on these claims in an

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[116] Laura Bliss, *Why Real-Time Traffic Control Has Mobility Experts Spooked*, BLOOMBERG CITYLAB (July 19, 2019), https://www.bloomberg.com/news/articles/2019-07-19/why-cities-want-digital-twins-to-manage-traffic.

[117] *See id.*; Marshall, *Why Uber Is Fighting Cities*, *supra* note 114. *But see* Zipper, *supra* note 107 (noting that Lime, another micromobility company, supported MDS).

[118] *See* Zipper, *supra* note 107 (reporting Electronic Frontier Foundation's privacy concerns); Natasha Duarte & Joseph Jerome, Center for Democracy and Technology, Comments to LADOT on Privacy & Security Concerns for Data Sharing for Dockless Mobility (Nov. 29, 2018), https://cdt.org/insights/comments-to-ladot-on-privacy-security-concerns-for-data-sharing-for-dockless-mobility/.

[119] Seleta Reynolds, General Manager, Los Angeles Dep't of Transportation, *Re: LADOT Data Protection Principles* (Mar. 22, 2019), https://ladot.io/wp-content/uploads/2019/03/LADOT_Data_Protection_Principles-1.pdf (identifying Data Protection Principles as (1) data minimization, (2) access limitation, (3) data categorization, (4) security, and (5) transparency for the public); *see also* Jump Complaint, *supra* note 114, at ¶¶ 72–73 (explaining process of proposal and endorsement of Data Protection Principles).

[120] *See* Reynolds, *supra* note 119, at 1–2.

[121] Jump Complaint, *supra* note 114, at ¶¶ 72–73.

[122] Lime took over business operations of Jump from Uber in May 2020 as part of a $170 million investment deal led by Uber. *See* Rosalio Ahumada, *Uber Unloads Jump on Lime in $170M Investment. Unknown When Bikes and Scooters Will Return*, SACRAMENTO BEE (May 8, 2020), https://www.sacbee.com/news/local/article242609486.html. Subsequently, it voluntarily dismissed the lawsuit. *See* Botero Arcila, *supra* note 108, at 162 n.1.

[123] Jump Complaint, *supra* note 114, at ¶¶ 90 (describing permit suspension), 109–10 (explaining challenge to MDS requirements).

administrative hearing,[124] it sought an injunction and declaratory relief barring LADOT from enforcing the MDS geolocation requirements.[125]

In arguing that LADOT's rules violated the Fourth Amendment, Jump explicitly relied on *Patel* and *Airbnb v. New York*.[126] Just as New York City's home-sharing ordinance was too broad in its scope and failed to offer an opportunity for review before a neutral arbiter, Jump argued, so too do "the MDS geolocation requirements operate in practice as an administrative search that is fundamentally untailored and unreasonable and provides no opportunity for pre-compliance review."[127]

Although Jump voluntarily dismissed its claims,[128] a second suit filed by the ACLU and Electronic Frontier Foundation challenged the MDS on similar grounds.[129] Litigating on behalf of individual scooter users, the groups' complaint also focused on the privacy intrusions from geolocation data. Noting that "the sensitivity of movement information makes it possible to identify individual riders," they contended that MDS's granular information would allow public authorities to learn about individuals' trips to sensitive locations, from their homes to Planned Parenthood clinics to protests.[130] The plaintiffs contended that LADOT's regime constituted an illegal administrative search for similar reasons that the *Airbnb v. New York* court had relied on: MDS's scope encompassed "granular vehicle and mobility location information," it was not connected to a legitimate government interest, and it failed to allow the subjects of a search an opportunity for pre-compliance review.[131]

The city moved to dismiss the claim.[132] First, it stated that scooter riders did not have a reasonable expectation of privacy in

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[124] *Id.* at ¶ 107 (explaining administrative hearing officer's decision upholding suspension).

[125] *Id.* at ¶¶ 121, 153.

[126] *See id.* at ¶¶ 10, 116 (citing *Patel* and *Airbnb v. New York* in Fourth Amendment argument); *see also id.*, Exhibit 2, Transcript of Hearing before David B. Shapiro, Hearing Officer at 176–78 (Jan. 27, 2020, 10:16 a.m.) (citing *Airbnb v. New York* and *Patel* for propositions that Jump has reasonable expectation of privacy in its records and that MDS was insufficiently tailored).

[127] *Id.* at ¶ 118.

[128] Notice of Dismissal Pursuant to Federal Rules of Civil Procedure 41(a) or (c), Social Bicycles d/b/a Jump v. City of Los Angeles, No. 2:20-CV-02746 (June 15, 2020).

[129] *See* ACLU of Southern California, Press Release, Rent a Scooter in L.A. and the City Government Knows Your Every Move (June 8, 2020), https://www.aclusocal.org/en/press-releases/privacy-lawsuit-your-scooter-gps-data-being-tracked (announcing lawsuit).

[130] Sanchez Complaint, *supra* note 108, at ¶¶ 26–27.

[131] *Id.* at ¶ 44.

[132] Defendants City of Los Angeles and Los Angeles Department of Transportation's Notice of Motion and Motion to Dismiss Pursuant to Fed. R. Civ.

their geolocation data, since micromobility companies inform customers that they collect that information and may share it with government authorities.[133] Second, it suggested that, since the administrative scheme was a "special needs" search in a closely regulated industry, users had a diminished expectation of privacy, and the city's non-law enforcement interests outweighed any privacy interests.[134]

In February 2021, the court granted LADOT's motion to dismiss.[135] Judge Gee held that MDS did not qualify as a Fourth Amendment search: although the technology collected information about users' scooter trips, this data collection was limited and reasonably anonymized.[136] Moreover, by choosing to use scooters offered by companies that already collect user information, individual riders "knowingly and voluntarily disclose[d]" their private information to a third party, thereby losing any reasonable expectation of privacy.[137]

The court proceeded to hold that even if MDS constituted a search, it was reasonable and satisfied the Fourth Amendment.[138] The court characterized MDS as an administrative search and then balanced users' privacy interests, the government's interests, and the nature of the intrusion involved.[139] Applying this balancing test, the intrusion was reasonable, because riders voluntarily utilized a service that only conducted limited privacy intrusions and LADOT had "legitimate and substantial" interests in regulating micromobility transit throughout the city.[140] Riders had no right to pre-compliance review, Judge Gee added, because MDS was "programmatic and uniform in application, without opportunity for discretion," unlike

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Proc. 12(b)(6), Memorandum of Points and Authorities, Sanchez v. L.A. Dep't of Transp., No. 2:20-CV-05044 (C.D. Cal. July 31, 2020) [hereinafter "Sanchez Motion to Dismiss"].

[133] *Id.* at 11–14.

[134] *Id.* at 9–11. Although courts also recognize that a Fourth Amendment search occurs when the government trespasses upon private property, *see* United States v. Jones, 565 U.S. 400, 409 (2012), Los Angeles stated that the trespassory framework did not apply to the information-sharing requirement, and the plaintiffs did not argue otherwise, *see* Sanchez Motion to Dismiss, *supra* note 132, at 8 n.5.

[135] Sanchez v. Los Angeles Dep't of Transp., No. CV 20-5044-DMG (AFMx), 2021 WL 1220690 (Feb. 23, 2021).

[136] *See id.* at *3.

[137] *Id.* at *4; *see also* Section III.B, *infra* (discussing impact of third-party doctrine on claims by individual users of technologies offered by businesses that explicitly disclose information to the government).

[138] *Sanchez*, 2021 WL 1220690, at *6.

[139] *Id.* at *5.

[140] *Id.*

individualized searches of businesses or homes pursuant to an administrative scheme that did require such an opportunity.[141]

Although the *Sanchez* court's analysis differed in some ways from the *Airbnb v. New York* court, particularly in its assessment of pre-compliance review for programmatic searches, the two decisions share important commonalities that will likely shape the LADOT case's path on appeal in the Ninth Circuit. In both contexts, the Fourth Amendment reasonableness inquiry balances the government's interest against the privacy interests of subjects of a search and the intrusiveness of the data reporting scheme (although the ACLU case may differ importantly from the home-sharing cases because the plaintiffs are users and not businesses[142]). To conduct this balancing, a court looks at whether the government has proffered a legitimate interest unrelated to law enforcement, the scope of the information requested through data-reporting provisions, and the availability of a pre-compliance review mechanism.

Together, the home-sharing and micromobility cases demonstrate the framework for how courts address local data reporting rules through the administrative search doctrine and *Patel*. The following sections revisit this doctrine to show that, in fact, it counsels a different approach to local data-sharing laws.

II. THE ADMINISTRATIVE SEARCH DOCTRINE AND THE CLOSELY REGULATED INDUSTRY EXCEPTION

As Part I described, the courts' reasoning for striking down local reporting requirements centers on *Patel*'s application of the administrative search doctrine. *Airbnb v. New York* relied almost entirely on that Supreme Court decision,[143] and later arguments evaluating local ordinances in turn relied on *Airbnb v. New York* and as the leading cases.[144]

This poses several problems. First, *Airbnb v. New York* used *Patel* for the proposition that the *scale* of a data reporting requirement has substantive limits, but *Patel* rested entirely on the lack of an opportunity for pre-compliance review, not the scope of a request; moreover, in the data-sharing context, the scale of a search is less important to the reasonableness of a search than the relevance of the data to a legitimate governmental interest.[145]

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[141] *Id.* at *5 n.8.

[142] *See* Section III.B, *infra* (discussing impact of third-party doctrine on claims by individual users of technologies offered by businesses that explicitly disclose information to the government).

[143] *See* Airbnb, Inc. v. City of New York, 373 F. Supp. 3d 467, 483–485, 489–94 (S.D.N.Y. 2019).

[144] *See* Airbnb, Inc. v. City of Boston, 386 F. Supp. 3d 113, 125 (D. Mass. 2019); Part I, *supra*.

[145] *See* Section III.A, *infra*.

Second, *Patel*'s emphasis on pre-compliance review is an awkward fit for an administrative data-reporting scheme, because the reports are regularized and inspectors have no discretion in requesting information.[146] Third, there are good reasons to apply the Court's more relaxed standard for closely regulated industries to data reporting requirements.[147]

Before reaching these points, however, this Part will provide an overview of the Fourth Amendment doctrine that culminated in *Patel*. To start, administrative searches provide an exception to the Fourth Amendment's warrant requirement with particular implications for local inspection and reporting regimes. The Court's analysis of administrative searches generally considers three factors: the government's interest, the relevance of the search to achieving that interest, and the opportunities for pre-compliance review. These requirements are further relaxed in cases that apply the "closely regulated industry" exception to administrative searches. Finally, this Part will examine *Patel* in some depth, with a particular focus on the puzzles raised by that decision and its progeny: the unclear scope for a permissible administrative search, the nature of pre-compliance review, and the extent of the closely regulated industry exception.

A. Administrative Searches and Local Inspections

Though the Fourth Amendment generally prohibits searches without individualized suspicion, the Supreme Court has carved out a more permissive doctrine for inspections addressed at "special needs" besides crime control.[148] In such cases, the Court first determines whether the government's interest is distinct from law enforcement, then it balances the government's interests against the intrusiveness of the search and the interests of the search's subject.[149] Using this approach, the Court has upheld searches of a range of groups, including public school students,[150] public

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[146] *See* Section III.B, *infra*.

[147] *See* Section III.C, *infra*.

[148] Griffin v. Wisconsin, 483 U.S. 868, 873 (1987) (quoting New Jersey v. T.L.O., 469 U.S. 325, 351 (1985) (Blackmun, J., concurring in judgment)).

[149] *See* Christopher Slobogin, *Panvasive Surveillance, Political Process Theory, and the Nondelegation Doctrine*, 102 GEO. L.J. 1721, 1726 (2014); *see also id.* at 1730–31 (listing factors considered in balancing analysis).

[150] Safford Unified Sch. Dist. No. 1 v. Redding, 557 U.S. 364, 370 (2009) (explaining that "a careful balancing of governmental and private interests suggests that the public interest is best served by a Fourth Amendment standard of reasonableness that stops short of probable cause") (quoting *T.L.O.*, 469 U.S. at 341); *see also* Vernonia Sch. Dist. 47J v. Acton, 515 U.S. 646, 664–65 (1995) (upholding suspicionless urine drug testing of student athletes because of the

officials,[151] and railway employees.[152] It has also upheld road checkpoints defended as measures to stop illegal immigration and drunk driving, for example.[153]

In *Patel*, the Court described "administrative searches" as a subset of the special needs analysis.[154] Though this typology may not be historically accurate—the first administrative search cases predate the Court's articulation of the "special needs" test,[155] and it is unclear whether there is any analytical difference between administrative searches and the rest of the "special needs" doctrine[156]—*Patel*'s typology is useful in delineating a category of searches that undergo a similar type of interest-balancing analysis to determine reasonableness.[157]

Administrative searches occur when the government conducts a warrantless search as part of an inspection regime for a purpose other than crime control.[158] The doctrine began with a pair of 1967 decisions concerning local governance challenges: *Camara v. Municipal Court of the City and County of San Francisco*[159] and

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students' "decreased expectation of privacy, the relative unobtrusiveness of the search, and the severity of the need met by the search").

[151] *See* O'Connor v. Ortega, 480 U.S. 709, 725 (1987) (applying standard of reasonableness to searches public employees).

[152] *See* Skinner v. Ry. Labor Execs.' Ass'n, 489 U.S. 602, 624 (1989).

[153] *See* Michigan Dep't of State Police v. Sitz, 496 U.S. 444, 455 (1990) (explaining that "the balance" of state interests to prevent drunk driving, checkpoint's capacity to further that interest, and intrusiveness no drivers supported upholding checkpoint system); United States v. Martinez-Fuerte, 428 U.S. 543, 562 (1976) (holding that stops and questioning "may be made in the absence of any individualized suspicion at reasonably located [border] checkpoints"). In other cases, the Court has struck down highway checkpoints using the same analytical framework. *See, e.g.*, City of Indianapolis v. Edmond, 531 U.S. 32, 48 (2000).

[154] City of Los Angeles v. Patel, 576 U.S. 409, 420 (2015).

[155] *See* Thomas K. Clancy, *The Role of Individualized Suspicion in Assessing the Reasonableness of Searches and Seizures*, 25 U. MEM. L. REV. 483, 547 (1995) (noting that *Camara*, the first administrative search case, was the Court's "first departure from individualized suspicion" and did not use the special needs test).

[156] *See* Maximilian Sladek de la Cal, Note, City of Los Angeles v. Patel*: The Fourth Amendment's Special Needs in the Information Age*, 31 BERKELEY TECH. L.J. 1137, 1150 (2016) (noting lack of clear distinctions between administrative searches and special needs cases); *see* Primus, *supra* note 28, at 276–77, 288 (discussing Court's classification of administrative search cases as "special needs" cases and "entanglement" of different types of administrative search analyses).

[157] *See* Primus, *supra* note 28, at 256 (explaining that under administrative search doctrine, courts "balance the government's interest in conducting the search against the degree of intrusion on the affected individual's privacy to determine whether the search is reasonable").

[158] *See* G. S. Hans, *Curing Administrative Search Decay*, 24 B.U. J. SCI. & TECH. L. 1, 4 & 4 n.12 (2018).

[159] 387 U.S. 523 (1967).

See v. City of Seattle.[160] In both, the Supreme Court articulated a relaxed reasonableness test for inspection regimes.

Camara concerned a provision in San Francisco's Housing Code that permitted warrantless home inspections.[161] The Court struck down the provision.[162] Although it recognized the city's interest in enforcing public health rules, the Court held that such "administrative searches . . . are significant intrusions upon the interests protected by the Fourth Amendment" and accordingly mandated procedural protections like a warrant.[163] However, it also lowered the threshold for the government to show probable cause in local code-enforcement inspections: if there were "*reasonable legislative or administrative standards* for conducting an area inspection," which San Francisco lacked in this case, then the city's inspection regime, and its search of a particular home that met those standards, would be reasonable.[164]

See extended this approach to physical inspections of commercial premises.[165] In that case, a warehouse owner had been convicted of violating a Seattle ordinance mandating that proprietors allow the fire department to enter their businesses for warrantless fire safety inspections.[166] The Court held that the fire inspector could not conduct the search "without a suitable warrant procedure."[167] The Court drew on both *Camara*'s discussion of physical searches of private residences and decisions addressing agency subpoenas of corporate records.[168] Such administrative subpoenas, it observed, must "be sufficiently limited in scope, relevant in purpose, and specific in directive so that compliance will not be unreasonably burdensome."[169] This tailoring requirement focused on the connection between the documents and the agency's interest, which accordingly limited the volume of documents sought: the agency "must *delimit* the confines of a search by designating the *needed* documents."[170] Finally, the target of a subpoena, and the business owner subject to an administrative inspection, must be able to obtain

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[160] 387 U.S. 541 (1967).

[161] Camara v. Mun. Ct. of the City and Cnty. of San Francisco, 387 U.S. at 525–526 & 526 n.1 (1967).

[162] *Id.* at 527.

[163] *Id.* at 534.

[164] *Id.* at 538 (emphasis added); *see also* Marshall v. Barlow's, Inc., 436 U.S. 307, 320–21 (1978) (explaining that under *Camara*'s framework, probable cause for a warrant for a suspicionless business inspection could be shown by "a general administrative plan" that was "derived from neutral sources").

[165] See v. City of Seattle, 387 U.S. 541, 542–43 (1967).

[166] *Id.* at 541–42.

[167] *Id.* at 546.

[168] *Id.* at 542, 544.

[169] *Id.* at 544.

[170] *Id.* (emphasis added).

judicial review of a subpoena before receiving penalties for noncompliance.[171]

Thus, *Camara* and *See* established a set of real, but relaxed, Fourth Amendment requirements for local inspection regimes. Although the Court maintained the rule that inspectors obtain warrants supported by probable cause, it measured probable cause "against a flexible standard of reasonableness" that considered the public interest in an inspection regime as well as the specificity and relevance of the information sought.[172] Indeed, it was willing to adopt an even more flexible standard if an individualized suspicion regime proved impracticable.[173] The Court anticipated that these limits on searches' scopes would cabin officials' discretion, create a "regulariz[ed]" inspection regime, and ensure the presence of a connection between the information sought and the government's purpose.[174]

The trigger for these relaxed requirements was an administrative regime related to some non-law enforcement interest.[175] In reality, as Christopher Slobogin has discussed, this distinction is difficult to sustain: law enforcement agencies can still use information from searches conducted for purportedly non-crime control reasons, such as sobriety checkpoints, in criminal prosecutions.[176] Additionally, it is unclear why the purpose of a search should bear upon whether the search itself is reasonable. In other parts of Fourth Amendment doctrine, courts expressly avoid consideration of officers' motivations at all.[177] Yet this doctrinal fuzziness has not bothered the Court: in *Patel*, it swiftly assumed that a Los Angeles ordinance served an interest besides crime control,

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[171] *Id.* at 544–545; *see also* Donovan v. Lone Steer, 464 U.S. 408, 415 (1984) (explaining that warrantless administrative subpoenas must "provide protection for a subpoenaed employer by allowing him to question the reasonableness of the subpoena, before suffering any penalties for refusing to comply with it, by raising objections in an action in district court").

[172] *See*, 387 U.S. at 545; *see also* Camara v. Mun. Ct. of the City & Cnty. of San Francisco, 387 U.S. 523, 536–37 (1967) (discussing considerations that go into flexible reasonableness determination).

[173] *See* Wayne R. LaFave, *Computers, Urinals, and the Fourth Amendment: Confessions of a Patron Saint*, 94 MICH. L. REV. 2553, 2578–79 (1996); *see also* Primus, *supra* note 28, at 270 (explaining that "dispensing with the requirement of individualized suspicion had to be necessary in order to advance the governmental interest at stake").

[174] Christopher Slobogin, *Policing as Administration*, 165 U. PA. L. REV. 91, 128–29 (2016); *see Camara*, 387 U.S. at 532–33; Primus, *supra* note 28, at 270.

[175] *See Camara*, 387 U.S. at 532–37; Primus, *supra* note 28, at 270.

[176] *See* Slobogin, *supra* note 174, at 109–11; Slobogin, *supra* note 149, at 1727–30.

[177] *See* Whren v. United States, 517 U.S. 806, 812–13 (1996).

and it focused its analysis on other aspects of the administrative search doctrine.[178]

Although these initial cases involved physical searches,[179] they remain relevant for local data reporting requirements because a similar analysis applies for an agency demand for information, like an administrative subpoena.[180] As the *See* Court observed, agency subpoenas for corporate books and records must be "sufficiently limited in scope, relevant in purpose, and specific in directive," and they must afford an opportunity for a business to challenge the subpoena before complying.[181] Courts have recognized that these requirements are functionally equivalent to those present for administrative searches, with the exception that agencies do not require warrants to issue subpoenas.[182] In both contexts, the court inquires as to the government's non-law enforcement purpose, the relevance and specificity of the search to achieve that purpose, and the opportunity for pre-compliance challenge and review.

B. The "Closely Regulated Industry" Exception

At first glance, the administrative search doctrine appears to provide the entire framework for analyzing a local data reporting

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[178] *See* City of Los Angeles v. Patel, 576 U.S. 409, 420 (2015).

[179] *See* Marshall v. Barlow's, Inc., 436 U.S. 307, 321 (1978) (explaining that warrant was needed for administrative search under the Occupation Safety and Health Act, but that its requirement could be met either through specific evidence or "a general administrative plan for the enforcement of the Act derived from neutral sources such as, for example, dispersion of employees in various types of industries across a given area, and the desired frequency of searches in any of the lesser divisions of the area").

[180] *See*, Camara v. Mun. Ct. of the City & Cnty. of San Francisco, 387 U.S. 523, 544–45 (1967) (drawing parallel between administrative subpoenas for corporate books and records and physical searches); Oklahoma Press Pub. Co. v. Walling, 327 U.S. 186, 208–09 (1946) (explaining that the Fourth Amendment applies to subpoenas of corporate books and records and that the "gist" of the protection is that the subpoenas should be reasonable).

[181] *See Camara*, 387 U.S. at 544–45; *see also* United States v. Morton Salt Co., 338 U.S. 632, 652 (1950) (observing that to uphold agency subpoena, "it is sufficient if the inquiry is within the authority of the agency, the demand is not too indefinite and the information sought is reasonably relevant").

[182] *See* Donovan v. Lone Steer, Inc., 464 U.S. 408, 415 (1984) (observing that agency subpoenas do not require warrant but that "nonetheless provide protection for a subpoenaed employer by allowing him to question the reasonableness of the subpoena, before suffering any penalties for refusing to comply with it, by raising objections in an action in district court"); *see also Patel*, 576 U.S. at 420 (citing *See*, 387 U.S. at 545, and *Lone Steer*, 464 U.S. at 415); Patel v. City of Los Angeles, 738 F.3d 1058, 1063–64 (9th Cir. 2013) (en banc), *aff'd sub nom.* City of Los Angeles v. Patel, 576 U.S. 409 (2015) (explaining that, unlike administrative inspections of physical premises, "administrative record inspections" do not require an administrative warrant and are governed by the limits identified in *See* and *Lone Steer*).

requirement such as those litigated in the home-sharing or micromobility cases. But, for certain "closely regulated industries,"[183] the Supreme Court has even further relaxed the warrant requirement.

While administrative searches require either some form of warrant or subpoena, albeit with a lower evidentiary threshold than probable cause, the government need not make any showing of suspicion or provide an opportunity for pre-compliance review in order to inspect certain "closely regulated" industries.[184] In *New York v. Burger*,[185] the Court explained that instead of these mechanisms, in a warrantless search regime of a closely regulated industry, (a) the government must have a "substantial" interest in the regulatory scheme;[186] (b) warrantless inspections must be "necessary" to that scheme;[187] and (c) the statute must advise a business owner of the search and cabin official discretion by establishing rules for regular inspections.[188]

The key issue for such searches is to determine *what* qualifies a business as "closely regulated." A history of regulation plays some role, but it is not decisive.[189] Instead, courts are more willing to consider the comprehensiveness and specificity of current regulatory regimes.[190] Courts will also look at the need for warrantless

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[183] Colonnade Catering Corp. v. United States, 397 U.S. 72, 74 (1970).

[184] *See* New York v. Burger, 482 U.S. 691, 702–03 (1987).

[185] 482 U.S. 691 (1987).

[186] *Id.* at 702 (quoting Donovan v. Dewey, 452 U.S. 594, 602 (1981)).

[187] *Id.* (quoting *Dewey*, 452 U.S. at 600).

[188] *Id.* at 703.

[189] *See id.* at 701, 705 (treating history of regulation as an "important factor" of "some relevancy," but not a necessary one); *Dewey*, 452 U.S. at 611 (Stewart, J., dissenting) (noting that historical considerations were absent in majority's determination that mines were a closely regulated industry); United States v. Biswell, 406 U.S. 311, 315 (1972) (upholding warrantless inspections of firearms merchants even though "federal regulation of the interstate traffic in firearms is not as deeply rooted in history as is governmental control of the liquor industry [in Colonnade Catering Corp. v. United States, 397 U.S. 72 (1970)]"). Some earlier "closely regulated industry" decisions, however, gave extensive weight to an industry's history of government regulation. *See* Marshall v. Barlow's, Inc., 436 U.S. 307, 313 (1978) (contrasting businesses engaged in interstate commerce with those that have experienced "a long tradition of close government supervision, of which any person who chooses to enter such a business must already be aware"); *Colonnade Catering Corp.*, 397 U.S. at 77 (explaining that federal authorities could fine a liquor licensee for refusing a warrantless entry by tax inspectors because the "liquor industry [was] long subject to close supervision and inspection").

[190] *See Burger*, 482 U.S. at 703–06 (discussing "extensive" regulations of auto junkyards); *Dewey*, 452 U.S. at 600 (explaining that Court will consider whether "federal regulatory presence is sufficiently comprehensive and defined" in determining whether industry is closely regulated); *Barlow's*, 436 U.S. at 314 (considering "order of specificity and pervasiveness" of regulation).

inspections to achieve government aims.[191] In *United States v. Biswell*,[192] for example, the Court upheld a firearms inspection regime by referring to the "urgent federal interest" in preventing violent crime and illicit firearms trafficking served by the gun control legislation at issue, and opined that only warrantless inspections would be effective.[193] Whereas in *See* the government could achieve its regulatory aims equally well with a warrant requirement—fire code violations would remain fire code violations regardless of when an inspector visited a building—in *Biswell*, unannounced inspections were crucial to deterring would-be violators of the Gun Control Act of 1968.[194] Similarly, in *Donovan v. Dewey*,[195] the Court applied the closely regulated industry exception to mine inspections under the Federal Mine Safety and Health Act of 1977,[196] holding that warrants were unnecessary "when Congress has reasonably determined that warrantless searches are *necessary* to further a regulatory scheme and the federal regulatory presence is sufficiently *comprehensive and defined* that the owner of commercial property cannot help but be aware that his property will be subject to periodic inspections undertaken for specific purposes."[197]

The Supreme Court has since proven reluctant to extend this exception.[198] Lower courts, however, have applied it to a wider range of businesses, creating a national patchwork of businesses deemed closely regulated depending on the jurisdiction. For example, the Third Circuit had "no difficulty" in holding that the funeral industry qualified as a closely regulated industry.[199] The Ninth Circuit applied the exception to day cares.[200] The Seventh Circuit held that rabbit breeders fell under the exception because the federal Animal and Plant Health Inspection Service had enacted "arguably pervasive" regulations under the Animal Welfare Act,[201] even though "one may

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[191] *See Dewey*, 452 U.S. at 600 (1981).

[192] 406 U.S. 311 (1972).

[193] *Id.* at 315–16.

[194] *See id.* at 316 (contrasting with *See v. City of Seattle* and concluding that in the context of the Gun Control Act, "if inspection is to be effective and serve as a credible deterrent, unannounced, even frequent, inspections are essential").

[195] 452 U.S. 594 (1981).

[196] Pub. L. No. 95-164, 91 Stat. 1290, 1297 (1977) (codified at 30 U.S.C. § 813(a) (2018)).

[197] *Dewey*, 452 U.S. at 600 (emphasis added).

[198] *See, e.g.*, City of Los Angeles, California v. Patel, 576 U.S. 409, 424–25 (2015) (arguing that "[t]o classify hotels as pervasively regulated would permit what has always been a narrow exception to swallow the rule"); Marshall v. Barlow's, Inc., 436 U.S. 307, 313–14 (1978) (explaining concern with making closely regulated industry exception "the rule").

[199] Heffner v. Murphy, 745 F.3d 56, 67 (3rd Cir. 2014).

[200] Rush v. Obledo, 756 F.2d 713, 714, 720–21 (9th Cir. 1985).

[201] Lesser v. Espy, 34 F.3d 1301, 1306–07 (7th Cir. 1994).

debate why the regulation of rabbitries is a federal matter."[202] Numerous courts have held that precious metals dealers fall under the exception.[203] In short, while the exception is limited in the Supreme Court, it has already spread to new contexts in other jurisdictions.[204]

Together, this exception and the administrative search doctrine create the context for the Court's 2015 decision in *Patel*. In that case, the Court addressed these two lines of cases in an attempt to clarify the administrative search doctrine, with implications for later courts' analyses of local data reporting requirements.

C. City of Los Angeles v. Patel *and Its Implications*

Patel concerned another Fourth Amendment challenge to a local administrative regime. Los Angeles required all hotel operators to keep records that included guests' names, addresses, arrival and scheduled departure dates, rates charged, methods of payment, and room numbers.[205] It also compelled hotel owners to make those records available to Los Angeles Police Department officers, or face a fine or imprisonment.[206] A group of motel owners and a lodging association brought a facial challenge against the ordinance as an unreasonable search under the Fourth Amendment.[207] Writing for the majority, Justice Sotomayor held first that facial Fourth Amendment challenges like the motel owners' claim against Los Angeles are permissible.[208] She then explained that, even assuming that the purpose of Los Angeles' inspection regime was to ensure compliance with recordkeeping rules rather than crime control,[209] it

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[202] *Id.* at 1307.

[203] *See* Liberty Coins, LLC v. Goodman, 880 F.3d 274, 283 (6th Cir. 2018); Gallaher v. City of Huntington, 759 F.2d 1155, 1159–60 (4th Cir. 1985); People v. Pashigian, 388 N.W.2d 259, 261–62 (Mich. Ct. App. 1986).

[204] *See also* City of Los Angeles v. Patel, 576 U.S. 409, 435–36 (2015) (Scalia, J., dissenting) (adding applications of the exception for pharmacies, massage parlors, fishing, and nursing homes) (citations omitted).

[205] *Id.* at 412–13 (citing L.A., CAL., MUN. CODE § 41.49 (2015)).

[206] *Id.* at 413 (citing L.A., CAL., MUN. CODE §§ 11.00(m), 41.49(3)(a) (2015)).

[207] *Id.*

[208] *Id.* at 415.

[209] *See* City of Los Angeles v. Patel, 576 U.S. 409, 420 (2015) ("Here, we assume that the searches authorized by [the ordinance] serve a 'special need' other than conducting criminal investigations: They ensure compliance with the recordkeeping requirement, which in turn deters criminals from operating on the hotels' premises."). Admittedly, the distinction between deterring crime through compliance with recordkeeping requirements and the law enforcement interests that fail to justify administrative searches is unclear. *See* Slobogin, *supra* note 174 at 110. However, this ambiguity did not trouble the Court.

must satisfy the requirements of an administrative search to avoid the warrant requirement.[210]

The Court then held that the Los Angeles ordinance was *not* a valid administrative search.[211] It began by observing that an administrative searches must provide the subject of a search with "an opportunity to obtain pre-compliance review before a neutral decisionmaker" before receiving penalties.[212] This review could take many forms: for example, the city could have issued an administrative subpoena against a motel owner, and the owner could have moved to quash before a court or an administrative law judge.[213] Here, however, the city's ordinance provided no such opportunity; rather, police could arrest a hotel owner who did not turn over a guest registry "on the spot."[214] That absence of pre-compliance review, alone, made the ordinance unconstitutional.[215] The Court did not address whether other components of the ordinance, such as the scope or relevance of the information that the city required the hospitality industry to report; instead, it stated that its "narrow" holding did not question the provisions that required extensive guest registries in the first place.[216]

The majority also held that the hotel ordinance should not be analyzed under the closely regulated industry exception.[217] Unlike prior cases in which the Court had recognized that a proprietor in a closely regulated industry had minimal expectations of privacy—liquor, firearms, mines, and automobile junkyards—hotels did not inherently pose "a clear and significant risk to the public welfare."[218] Although there was some history of hotel regulations, these did not rise to the level of pervasiveness.[219] And even if the exception for closely regulated industries applied, Los Angeles' ordinance would still fail *Burger*'s three-part test.[220] Warrantless inspections were not necessary to enforce the city's hotel registry laws,[221] and the

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[210] *Patel*, 576 U.S. at 420.

[211] *Id.* at 419.

[212] *Id.* at 420 (citing Donovan v. Lone Steer, Inc., 464 U.S. 408, 415 (1984); See v. City of Seattle, 387 U.S. 541, 545 (1967)).

[213] *See id.* at 422–23.

[214] *Id.* at 421.

[215] *See id.* at 419 (holding that ordinance is "facially unconstitutional *because it fails to provide hotel operators with an opportunity for precompliance review*") (emphasis added).

[216] *Id.* at 423.

[217] *Id.* at 424. *See also id.* at 434 (Scalia, J., dissenting) (arguing that hotels fell under the closely regulated industry exception and that "[t]he regulatory regime at issue here is thus substantially *more* comprehensive than the regulations governing junkyards in *Burger*").

[218] *Id.* at 424.

[219] *Id.* at 425–26.

[220] *See id.* at 426.

[221] *Id.* at 426–27.

ordinance did not create a regularized inspection regime that would adequately cabin police officers' discretion.[222]

Patel thus made at least two main contributions to the administrative search doctrine.[223] First, the Court emphasized that administrative searches must offer some form of neutral pre-compliance review before the subject of a search must provide documents, unless they are closely regulated industries. This pre-compliance review requirement applies regardless of the scope of a search or whether it consists of document requests, physical inspections, or another format. Second, it confirmed that hotels are not closely regulated industries.

These conclusions raise their own questions. If administrative searches must involve a degree of tailoring, then what determines the limits on their scope? What is the relevant window of time for pre-compliance review if a search is part of a regime of regular reports or continuous data sharing? And if the hotel industry is not regulated sufficiently to qualify as closely regulated, what determines the reach of that exception?

The answers can determine the viability of local data reporting regimes. For example, because *Patel* leaves the permissible *scope* of a reporting requirement unclear, cities risk invalidation for any reporting requirement that applies to data in which a business claims a privacy interest. Indeed, the *Airbnb v. New York* court rested much of its opinion on the large volume of data requested from home-sharing platforms,[224] while another court held that Boston's data reporting requirements for home-sharing platforms violated the Fourth Amendment insofar as they required platforms to report the number of days a unit was rented each month—a much narrower category of information than the New York ordinance sought.[225] If the excessive scope of a data reporting requirement makes it an unconstitutional search, these results suggest that courts have not yet found the line that divides permissible focus from impermissible overbreadth.

Patel's ambiguity about pre-compliance review also creates problems for data reporting laws. To illustrate, remember that the

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[222] *Id.* at 427–28.

[223] *See also* Sladek de la Cal, *supra* note 156, at 1139–40 (summarizing *Patel*'s Fourth Amendment holdings more broadly).

[224] *See* Airbnb, Inc. v. City of New York, 373 F. Supp. 3d 467, 491, 494 (S.D.N.Y. 2019).

[225] *See* Airbnb, Inc. v. City of Boston, 386 F. Supp. 3d 113, 125 (D. Mass. 2019); *see also id.* at 125 n.14 (acknowledging that Boston data-sharing provision was "far less intrusive" than New York ordinance). Similarly, a district court in Texas held that a local ordinance allowing subpoenas of business records to enforce sick leave rules—a narrower sweep of information than New York's home-sharing ordinance—was unconstitutional absent an opportunity for precompliance review. ESI/Emp. Sols., L.P. v. City of Dallas, 450 F. Supp. 3d 700, 726 (E.D. Tex. 2020).

suits against LADOT's micromobility rules specifically challenged its MDS tool, which makes businesses provide both real-time and historical trip information.[226] But what does pre-compliance review look like for a data-reporting system that operates on a daily or continuous basis? Should businesses have an opportunity to challenge each day's report? If so, the MDS system could become unworkable.[227] Nor is it apparent that a daily opportunity to challenge a search would provide meaningful additional protection to a business's privacy interests: the categories of information a business must report each day under a requirement like MDS are theoretically constant, and individual officials have no discretion to subject businesses to additional searches. A challenge to a twenty-four-hour reporting requirement on day one would likely resemble a challenge to the requirement on day five hundred.

In short, though the administrative search doctrine is the dominant framework for analyzing local data reporting laws, several core elements of the doctrine remain unresolved even after *Patel*, and courts' responses to this ambiguity will determine the viability of the growing number of local regulatory regimes that cities have enacted in response to the arrival of data-intensive industries.

III. REIMAGINING ADMINISTRATIVE SEARCHES FOR LOCAL DATA REPORTING

I propose three solutions to the challenges posed by the administrative search doctrine's unclear scope, the timing of pre-compliance review, and the applicability of the closely regulated industry exception. First, in determining the scope of an administrative search, courts should focus more on the *relevance* of the information sought to the government's purpose rather than the sheer *scale* of the data. Second, for regularized, repeated, and discretion-less administrative searches like local data reporting requirements, courts should consider the opportunity for pre-compliance review to occur before a business's first reporting obligation, and not at each report deadline. Finally, the Fourth Amendment analysis for closely regulated industries, which focuses on the tailoring of a regulatory regime as a whole and considers the opportunities for on-the-ground officers' discretion, should be extended to local data reporting laws.

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[226] *See* Jump Complaint, *supra* note 114, at ¶ 116; Sanchez Complaint, *supra* note 109, at ¶ 44.

[227] *See* Jump Complaint, *supra* note 114, at ¶ 118 (noting that the challenged APIs "by their nature make precompliance review impossible").

A. The Scale of an Administrative Search

Courts' unguided and inconsistent analyses as to the permissible scope of an administrative search poses a particular challenge for local data reporting requirements because of the sheer amount of information that is involved. Unlike a police officer visiting a hotel to view its guest records, a city agency that receives data on home-sharing can learn about thousands or millions of data points on locations, owners, guests, and payments over time. The scale of the information is a major source of the governance value of a data reporting law, as it allows officials to determine patterns in traffic, movement, and services that inform policy decisions.[228]

At the same time, the scale of the search motivated the *Airbnb v. New York* court to strike down that city's ordinance: its grant of a preliminary injunction rested "*most notably, [on] the scale of the user data compelled to be produced*, as measured against the precedents that require that the demands of subpoenas and regulatory searches and seizures be reasonably tailored and that reject governmental attempts to dispense with tailoring in the generalized interest of investigative efficacy."[229] Yet, although the court then claimed that the scale of the New York City ordinance "dwarf[ed]" the Los Angeles ordinance in *Patel*,[230] the Supreme Court gave almost no mention of the scope of the search at issue in that earlier case.[231] *Patel*'s holding rested entirely on the absence of pre-compliance review.[232]

In fact, the two cities' reporting provisions appear to have sought similar types of information. Los Angeles' ordinance required hotel owners to provide guests' names, license plate numbers, the rates charged and paid, and scheduled departure dates.[233] To compare, New York City ordered home-sharing platforms to report the names of guests and hosts, contact information, listing address, online information for the listing, length of stay, and payment

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[228] *See, e.g.*, Marshall, *supra* note 40; Zipper, *supra* note 108.

[229] Airbnb, Inc. v. City of New York, 373 F. Supp. 3d 467, 494 (S.D.N.Y. 2019) (quoting See v. City of Seattle, 387 U.S. 541, 544 (1967)) (emphasis added).

[230] *Airbnb v. New York*, 373 F. Supp. 3d at 491 (explaining that "[i]n its sweep, the Ordinance dwarfs that of the Los Angeles ordinance at issue in *Patel*. The universality of the Ordinance's monthly production demand (covering all short-term rentals in New York City), the sheer volume of guest records implicated, and the Ordinance's infinite time horizon all disfavor the Ordinance when evaluated for reasonableness under the Fourth Amendment").

[231] *See* City of Los Angeles, Calif. v. Patel, 576 U.S. 409, 419–23 (2015).

[232] *See id.* at 428 (holding that ordinance is "facially invalid insofar as it fails to provide any opportunity for precompliance review").

[233] *Id.* at 412–13.

information.[234] At first glance, these two lists do not seem qualitatively different.

To reach its conclusion, the *Airbnb v. New York* court employed another element of the administrative search doctrine: under *See*, agency searches of corporate books and records must be "sufficiently limited in scope, relevant in purpose, and specific in directive so that compliance will not be unreasonably burdensome."[235] In other words, unlike the procedural protection provided by pre-compliance review, *See* indicates that an administrative search also has substantive limits.[236] The Court in that decision imagined that judges would balance these three requirements for requested information—that the request be limited, relevant, and specific—in its "flexible standard of reasonableness."[237] However, the *Airbnb v. New York* court only focused on the first prong, the scope limitation, while disregarding relevance and specificity.

The inquiries for the three prongs are not identical for local data laws, as New York City's data sharing requirements for taxis and ride-hailing vehicles demonstrate. The city's stated purpose for the data sharing is to monitor traffic patterns, determine which areas need improvements, and help determine where there is need for transit.[238] This data is only *relevant* to the city's Taxi and Limousine Commission if companies like Uber and Lyft share the information for a large volume of rides; less detailed or fewer reports, in contrast, are less relevant to a city's attempts to address transit problems, but have a more limited scope. Cities therefore face a paradox if courts credit the sheer volume of data sharing in deciding the reasonableness of a reporting requirement. If the volume of data is too big, then under *Airbnb v. New York* the search is more likely to be unconstitutional. But if the volume is too small, then it is less relevant, and also more likely to be unconstitutional.

Additionally, although *See* explained that the reasonableness of a subpoena of business records must be sufficiently limited to avoid unreasonable burden to a business,[239] even a wide-ranging information request may not pose a heavy burden on a company that routinely collects and stores digital data. In contrast, under the Los Angeles ordinance in *Patel*, officers or inspectors physically entered

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[234] *See* N.Y.C. Local Law 146/2018, § 1 (adding N.Y.C. ADMIN. CODE § 26-2102); *see also Airbnb v. New York*, 373 F. Supp. 3d at 474–75 (discussing reporting requirements in Local Law 146).

[235] *Airbnb v. New York*, 373 F. Supp. 3d at 487 (quoting *See*, 387 U.S. at 544).

[236] *See* Donovan v. Lone Steer, Inc., 464 U.S. 408, 415 (1984); Oklahoma Press Pub. Co. v. Walling, 327 U.S. 186, 208 (1946).

[237] *See*, 387 U.S. at 545.

[238] *See* Marshall, *supra* note 40.

[239] *Cf.* See v. City of Seattle, 387 U.S. 541, 544 (1967).

business premises to access records,[240] and the Seattle ordinance in *See* involved physical "investigative entry upon commercial establishments."[241] Permitting officials to enter a business and inspect the books without a warrant may signal an unreasonable burden. But that burden does not necessarily carry over to electronic data sharing, especially when a business collects the data already.

Courts should weigh relevance and specificity more than the sheer scale of a data reporting law, or at least return to the multi-factor consideration described by the *See* Court. Such an approach would also accord with the doctrine's historically limited emphasis on the breadth of a search in comparison to the other prongs: in several of the cases on which *See* relied,[242] the court had either suggested that the specificity and scope limitation prongs were interchangeable,[243] or it omitted reference to a scope limitation altogether.[244]

Nor should deemphasizing the volume of information implicated in a local data reporting law open the door to fishing expeditions, as the *Airbnb v. New York* court evidently worried.[245] The concern about fishing expeditions—that agencies will use their subpoenas to try to discover crimes for which they have inadequate proof[246]—again relates more to the relevance and specificity of

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[240] *See* City of Los Angeles, Calif. v. Patel, 576 U.S. 409, 413 (2015).

[241] *See*, 387 U.S. at 545; *see also* Marshall v. Barlow's, Inc., 436 U.S. 307, 309 (1978) (explaining that statute authorized "agents of the Secretary of Labor . . . to *search the work area* of any employment facility within the Act's jurisdiction") (emphasis added).

[242] *See,* 387 U.S. at 544 n.5 (citing United States v. Morton Salt Co., 338 U.S. 632 (1950), Oklahoma Press Pub. Co. v. Walling, 327 U.S. 186 (1946), United States v. Bausch & Lomb Optical Co., 321 U.S. 707 (1944), and Hale v. Henkel, 201 U.S. 43 (1906)).

[243] *See Oklahoma Press*, 327 U.S. at 208 (explaining that the Fourth Amendment "at the most guards against abuse only by way of too much *indefiniteness or breadth* in the things required to be 'particularly described,' if also the inquiry is one the demanding agency is authorized by law to make and the materials specified are relevant") (emphasis added); *see also Hale*, 201 U.S. at 76–77 (explaining that subpoena was "far too sweeping" in terms of both breadth and specificity).

[244] *See Morton Salt*, 338 U.S. at 652 (explaining that for Fourth Amendment purposes, government investigation "is sufficient if the inquiry is within the authority of the agency, the demand is not too indefinite and the information sought is reasonably relevant").

[245] Airbnb, Inc. v. City of New York, 373 F. Supp. 3d 467, 495 (S.D.N.Y. 2019) (contending that city's logic would allow for compelled production of auction records, medical records, and credit card transactions in order to efficiently discover criminal activity).

[246] *See* Fed. Trade Comm'n v. Am. Tobacco Co., 264 U.S. 298, 305–06 (1924).

information requested to the government's purpose rather than the volume of the information.[247]

Perhaps, however, the *Airbnb v. New York* court was not really worried that New York City's home-sharing law swept in too much information, but rather that it was too intrusive for individual users.[248] On this reading, when the court writes about the "scale" of data collection, its unspoken concern is the level of "detail" the government learns about customers and businesses. Thus, in some circumstances a local reporting requirement might be reasonable if it anonymizes or aggregates the information that it collects, thereby diminishing the level of detailed information about individuals available to the government.

Determining a reporting requirement's reasonableness by reference to its specificity and relevance to a government purpose best addresses this possibility too. An emphasis on scale maps poorly onto an anxiety about government actors accessing sensitive personal information: a search or seizure can sweep in a large volume of data that has nothing to do with an individual's life without a warrant (such as a highway checkpoint),[249] or it could target a limited type of information that proves to be sensitive, requiring a warrant (such as a blood alcohol test, in some circumstances).[250] Instead, if a law requires companies to transmit extensive information that is not *relevant* to a government interest, or if it does not specify the precise types of information that should be reported, then courts should be more hesitant to hold that the law is reasonable under the Fourth Amendment.

In this framework, anonymization and aggregation techniques may help tailor a search so that it is more relevant to a government interest. Consider a local law requiring ride-sharing firms to report trip routes but omit all other passenger and driver information, such as phone numbers and payment information. A provision demanding these specific categories of information would be relevant to a city's attempt to learn about traffic problems, but it would not necessarily

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[247] As the Court explained, the danger posed by a fishing expedition is both that a business would lose its records (a concern that no longer exists when records can be digitally copied or stored), and those records are "not shown to be necessary in the prosecution of [the] case, and [are] clearly in violation of the general principle of law with regard to the particularity required in the description of documents necessary to a search warrant or subpoena." Hale v. Henkel, 201 U.S. 43, 77 (1906).

[248] *See Airbnb v. New York*, 373 F. Supp. 3d at 490–91 (observing, in the context of critiquing the scale of the reporting requirement, that "[t]he information called for appears to capture virtually all monthly information the service receives *from each user*") (emphasis added).

[249] *See, e.g.*, Mich. Dep't of State Police v. Sitz, 496 U.S. 444, 451–53 (1990).

[250] *See, e.g.*, Birchfield v. North Dakota, 136 S. Ct. 2160, 2184 (2016).

intrude on users' sensitive information, even if the search involved a large volume of data. However, anonymization would not be a one-size-fits-all solution under this framework: cities enforcing STR health and safety codes or registration requirements may still seek to identify specific properties and property owners. Thus, the tripartite balancing between scale, relevance, and specificity will have different outcomes depending on the type of data reporting regime and the privacy concerns that it implicates.

B. Pre-compliance Review for Recurrent, Discretion-less Reports

Courts and litigants' current understanding of pre-compliance review also makes it difficult to evaluate local data reporting laws, because these schemes involve recurrent (or continuous), regularized, and discretion-less searches. This reality raises additional administrability and doctrinal concerns.

As noted previously, *Patel* emphasized that, for hotel owners, an opportunity for pre-compliance review created an important procedural protection from unreasonable searches,[251] although it avoided prescribing a specific format.[252] In both the micromobility and home-sharing contexts, critics of local rules contended that they did not provide this safeguard.[253] Although the *Airbnb v. New York* court was unclear as to the specific form that review should take, it suggested that home-sharing platforms should have an opportunity to object to a reporting requirement "before a monthly production deadline."[254] Under that view, a business should be able to challenge the reasonableness of a search before each new data transfer, even if a neutral arbiter held a previous, identical search to be reasonable.

This understanding presents two difficulties. First, it creates serious administrability concerns, by threatening to make almost any local data reporting requirement prohibitively tied up in litigation. Consider the case of a monthly reporting requirement, such as New

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[251] City of Los Angeles, Calif. v. Patel, 576 U.S. 409, 421 (2015) (stating that "a hotel owner must be afforded an *opportunity* to have a neutral decisionmaker review an officer's demand to search the registry before he or she faces penalties for failing to comply"); *see also* Donovan v. Lone Steer, Inc., 464 U.S. 408, 415 (1984) (explaining that the Fourth Amendment protects subpoena employers "by allowing [them] to question the reasonableness of the subpoena, before suffering any penalties for refusing to comply with it, by raising objections in an action in district court").

[252] *See Patel*, 576 U.S. at 423 (noting that constitutionally adequate opportunities for precompliance review can take multiple forms).

[253] *See* Airbnb, Inc. v. City of New York, 373 F. Supp. 3d at 495; Jump Complaint, *supra* note 114, at ¶¶ 10, 116–18.

[254] *Airbnb v. New York*, 373 F. Supp. 3d at 493.

York City's Local Law 146. If, as the court reasoned in that case, the administrative scheme created by the ordinance amounted to the "functional equivalent of a legislative edict mandating that [the enforcement agency] issue an identical subpoena to every covered [platform] operating in New York City" each month,[255] then a home-sharing platform could move to quash the subpoena at regular intervals, resulting in drawn-out and repetitive litigation about the scope and burden posed by each information request. This cycle of subpoenas and quashing motions has occurred in New York in a related context, for example.[256] The problem becomes more pronounced for frequent or continuous searches, such as Los Angeles' MDS regime, which enables real-time or historical data reporting.

Second, a rule that pre-compliance review must be available "before the deadline" misconstrues the governmental and privacy interests at stake in a data reporting law, such as the local home-sharing and micromobility initiatives, that establishes discrete categories of information, timelines, and submission procedures. In theory, no individual official has discretion to request additional data or alter reporting frequencies in such laws. The administrative search doctrine developed in the shadow of the Court's anxiety about the prospect of warrantless searches granting officers "almost unbridled discretion,"[257] but given data reporting laws' *absence* of discretion, the reasonableness of a search must turn on other factors, which are constant across reporting deadlines. A business subject to the law would have the same privacy interests throughout this timeline, so mandating pre-compliance review before each deadline provides little, if any, additional protection to the business's privacy interests.

In contrast, focusing on pre-compliance review opportunities before a deadline may overlook privacy interests that are uniquely relevant for regularized reporting laws. While we might consider a search or seizure to intrude slightly on privacy interests when conducted once (as in a single highway sobriety checkpoint),[258] a repeated search against the same individual may seem more

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[255] *Id.* at 491.

[256] *See, e.g.*, City of New York v. Homeaway.com, Inc., No. 450758/2019, 2020 WL 2198223 (N.Y. Sup. Ct. May 06, 2020); City of New York v. Airbnb, Inc., No. 157516/2018, 2019 WL 2142299 (N.Y. Sup. Ct. May 16, 2019); Airbnb, Inc. v. Schneiderman, 989 N.Y.S.2d 786 (N.Y. Sup. Ct. 2014).

[257] Marshall v. Barlow's, Inc., 436 U.S. 307, 323 (1978); *see also* Delaware v. Prouse, 440 U.S. 648, 653–54 (1979) ("The essential purpose of the proscriptions in the Fourth Amendment is to impose a standard of 'reasonableness' upon the exercise of discretion by government officials, including law enforcement agents, in order 'to safeguard the privacy and security of individuals against arbitrary invasions.'") (quoting *Barlow's*, 436 U.S. at 312).

[258] *See* Mich. Dep't of State Police v. Sitz, 496 U.S. 444, 455 (1990).

intrusive (e.g., if the checkpoint were placed on the road leading out from the same neighborhood every day). In such cases, the fact that a single search is reasonable under an individualized suspicion standard or existing warrantless-search doctrine is beside the point—the intrusions and interests at play in the search are only evident when the program is evaluated as a whole.

These difficulties indicate that when we think about *Patel*'s pre-compliance review command in the context of data reporting laws, it is wrong to mandate an opportunity for such review before every reporting deadline. Instead, an opportunity for pre-compliance review should occur before the first instance a business must comply with a reporting requirement—in other words, only the first deadline really matters when the categories of information requested remain constant and the law prohibits officials from discretionarily demanding more information from businesses. This approach also has practical benefits: local governments will have the certainty of a definite ruling and businesses will avoid the hurdles of creating a legal challenge to new information requests on a tight deadline.

This view complements some scholarly arguments that administrative law principles should guide Fourth Amendment cases.[259] Commentators have suggested ways to align government searches with administrative-law goals like transparency and accountability. For example, legislation could delineate agency practices by identifying an "intelligible principle" to limit search programs, or courts could require law enforcement agencies to provide an opportunity for public comment and a reasoned explanation for a search program before implementing a data reporting requirement.[260] If a court reviews administrative constraints on officials' ability to conduct a search, rather than a specific, one-off information request, then a court can review the reasonableness of the entire data-reporting scheme.[261] Of course, changing the timing of pre-compliance review alone does not automatically import these administrative law aims into Fourth Amendment doctrine. Rather, the timing shift facilitates this type of review: to the extent that a court seeks to implement procedural administrative law protections, like arbitrary and capricious review[262]

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[259] *See, e.g.*, Amsterdam, *supra* note 23, at 416–23; Renan, *supra* note 18, at 1077–83; Slobogin, *supra* note 174, at 95, 120–22.

[260] *See* Slobogin, *supra* note 149, at 1759–60, 1764–65 (discussing application to law enforcement of requirements that legislature delegate authority through a intelligible principle and agency gives a reasoned explanation for action).

[261] *See* Renan, *supra* note 18, at 1080–81.

[262] *See* Motor Vehicle Mfrs. Ass'n of U.S. v. State Farm Mut. Auto. Ins. Co., 463 U.S. 29, 43–44 (1983).

or some form of notice-and-comment requirements,[263] these analyses should consider a city's policy as a whole rather than at the moment a business opposes turning over a specific piece of information.

A skeptic of this proposal could argue that removing opportunities for pre-compliance review would leave *individual* users of businesses' technology without legal recourse if they decide to use that technology after the city has implemented the reporting requirement or successfully defended it from challenge. This concern seems overstated for two reasons. First, even if the availability of pre-compliance review is limited to only the period before the first required report, opponents of a data reporting scheme retain the option of bringing a facial Fourth Amendment challenge, as in *Patel*,[264] without the timing constraint. In such cases, even an opportunity for pre-compliance review would not necessarily defeat a claim that administrative search regimes are unreasonable on their face.

Second, users likely lack recourse anyway under current Fourth Amendment law: while it remains possible in theory for users to claim privacy rights in their own data,[265] the current status of the third-party doctrine strongly suggests that these arguments will fail for users of most products that collect extensive user data and are subject to local regulation.[266] Under the traditional formulation of that rule, the Fourth Amendment does not prevent the government from obtaining information that an individual communicated to a third party, even if the individual did not intend for the information to be divulged.[267] There is a strong argument that a user of Airbnb or Uber would not have a reasonable expectation of privacy in their personal data. Because they have voluntarily participated in a data-intensive service—indeed, one that explicitly collects their information and indicates on its terms of service that it may share that information

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[263] *See* Barry Friedman & Maria Ponomarenko, *Democratic Policing*, 90 N.Y.U. L. REV. 1827, 1834–35, 1839–43 (2015) (arguing for extension of notice-and-comment rulemaking requirements to police); Renan, *supra* note 18, at 1091–97 (discussing effects of potential notice-and-comment requirements on Fourth Amendment jurisprudence).

[264] *See* City of Los Angeles v. Patel, 576 U.S. 409, 415–19 (2015).

[265] *See* Airbnb, Inc. v. City of New York, 373 F. Supp. 3d 467, 483 n.7 (S.D.N.Y. 2019) (noting that "in theory a user could have brought a Fourth Amendment claim of his or her own, presumably attempting to extend the principles of [Carpenter v. United States, 138 S. Ct. 2206 (2018)] to this context," but that no user had done so).

[266] *See* Hans, *supra* note 158, at 10.

[267] *See* United States v. Miller, 425 U.S. 435, 443 (1976) ("[T]he Fourth Amendment does not prohibit the obtaining of information revealed to a third party and conveyed by him to Government authorities, even if the information is revealed on the assumption that it will be used only for a limited purpose and the confidence placed in the third party will not be betrayed.").

with the government[268]—a user would lack a reasonable expectation of privacy in that data.[269]

The Supreme Court's 2018 decision in *Carpenter v. United States*,[270] while marking an important shift in third-party doctrine, probably does not change this result. In that decision, Chief Justice Roberts explained that the doctrine did not apply to the "novel circumstances" of cell-site location information (CSLI), records of cell phones' location held by wireless carriers;[271] unlike prior technologies, CSLI was uniquely intrusive, continuous, inexpensive, and "all-encompassing."[272] Where a technology is similar to CSLI in these ways, the fact that a third party held users' information may no longer be sufficient to avoid the warrant requirement.[273] However, the information held by local data collectors is not analogous to CSLI. Unlike cell phones, which are "'such a pervasive and insistent part of daily life' that carrying one is indispensable to participation in modern society,"[274] a user's participation in home-sharing, ride-hailing, or micromobility services is often voluntary and temporary, not omnipresent or continuous.[275] The government would have a stronger argument that by participation in such a service, a user has provided consent to third-party disclosure, much like a defendant who has disclosed financial records to a bank.[276]

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[268] *See, e.g.*, Sanchez Motion to Dismiss, *supra* note 132, at 18–20 (indicating e-scooter companies' privacy policies); *Airbnb Privacy Policy*, AIRBNB, https://www.airbnb.com/terms/privacy_policy (last updated Oct. 30, 2020) (stating that "Airbnb and Airbnb Payments may disclose your information, including personal information, to courts, law enforcement, governmental authorities, tax authorities, or authorized third parties . . . ."); *Uber Privacy Notice*, UBER, https://www.uber.com/legal/en/document/?country=united-states&lang=en&name=privacy-notice (last modified Apr. 1, 2021) (stating that "Uber may share users' personal data if we believe it's required by applicable law, regulation, operating license or agreement, legal process or governmental request, or where the disclosure is otherwise appropriate due to safety or similar concerns").

[269] *See* Sanchez v. Los Angeles Dep't of Transp., No. CV 20-5044-DMG (AFMx), 2021 WL 1220690, at *4 (Feb. 23, 2021).

[270] 138 S. Ct. 2206 (2018).

[271] *Id.* at 2217; *see also id. at* 2211–12 (describing CSLI).

[272] *Id.* at 2217–18; *see also* Susan Freiwald & Stephen Wm. Smith, *The* Carpenter *Chronicle: A Near-Perfect Surveillance*, 132 HARV. L. REV. 205, 219–20 (2018) (explaining that the hidden, continuous, indiscriminate, and intrusive nature of the search was decisive in the *Carpenter* opinion).

[273] *See* Freiwald & Smith, *supra* note 272, at 228–31 (applying *Carpenter* to other technologies); Paul Ohm, *The Many Revolutions of* Carpenter, 23 HARV. J.L. & TECH. 357, 378–80 (2019) (arguing that *Carpenter* applies to web browsing records).

[274] *Carpenter*, 139 S. Ct. at 2220 (quoting Riley v. California, 573 U.S. 373, 385 (2014)).

[275] *See* Botero Arcila, *supra* note 108, at 173.

[276] *See Miller*, 425 U.S. at 437–38.

In summary, regularized data reporting requirements fit poorly with an understanding of pre-compliance review that involves adjudication before each transfer of information. Instead, because such a data scheme consists of identical information requests and leaves no room for on-the-ground officers to exercise discretion, an opportunity for pre-compliance review need be present only before a business first becomes subject to the reporting mandate. Changing the "timing" of pre-compliance review will allow courts to evaluate the reasonableness of the entire scheme and utilize administrative-law concepts of procedural fairness when evaluating local data laws.

C. Extending the "Closely Regulated Industry" Exception

Courts would not need to resolve the competing views of the timeline or scope of an administrative search if they simply extended the closely regulated industry exception to businesses engaged in collecting local data. Under this view, businesses that participate in industries subject to pervasive regulation have a diminished expectation of privacy, and by participating in the industry they accept the risk that they may be subject to warrantless inspections.[277] Warrantless inspection regimes in closely regulated industries must satisfy the three-pronged *New York v. Burger* test: (a) the regulatory scheme must further a "substantial" government interest; (b) warrantless searches must be "necessary" to further that interest; and (c) the regulatory scheme must adequately substitute for a warrant, both by providing notice to subjects of a search and by limiting inspectors' discretion.[278]

If courts applied this exception to local reporting requirements, many ordinances requiring data-intensive businesses to provide regular reports would survive Fourth Amendment scrutiny. First, cities likely have substantial interests in regulatory regimes that enforce health and safety rules or prevent unlawful land uses. Even in *Patel*, the Court accepted with little difficulty that Los Angeles could have a substantial interest in ensuring that hotels maintain guest registries.[279] Second, appropriately tailored warrantless reporting requirements can be necessary to achieve these interests, because the transactions in the sharing economy are widespread, frequent, and difficult to detect without digital tools.[280] Finally, once a regularized reporting requirement is in place, it could substitute for a warrant, because businesses would be on notice of the information

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[277] *See* New York v. Burger, 482 U.S. 691, 701 (1987) (quoting United States v. Biswell, 406 U.S. 311, 316 (1972)).

[278] *See id.* at 702–03.

[279] *See* City of Los Angeles v. Patel, 576 U.S. 409, 426 (2015).

[280] *See* Part I, *supra*.

that they would be required to disclose, and there would be no space for official discretion.[281]

This test would not supply a blank check for cities to demand information, either. In *Patel*, for instance, the Supreme Court explained that the Los Angeles ordinance's warrantless inspection regime would be unconstitutional even if the exception for closely regulated industries applied.[282] That warrantless regime was not *necessary* because officers could still undertake surprise inspections of suspicious businesses through *ex parte* warrants, and it did not substitute for a warrant because it placed no limits on police officers' discretion.[283] Similarly, local data reporting requirements, like those in home-sharing and micromobility contexts, would not be "necessary" if there were adequate, less intrusive substitutes for achieving a city's interests, and they would not substitute for a warrant if they conferred broad discretion on officers to request information at any time, or if they allowed cities to change their information requests without notice.

However, the *Patel* Court held that hotels were not closely regulated industries,[284] and the *Airbnb v. New York* court, following that decision, did not apply the exception to home-sharing.[285] In *Patel*, the Court reasoned that in contrast to other regulatory regimes of industries that "pose[d] a clear and significant risk to the public welfare,"[286] Los Angeles' requirements for hotels to maintain licenses, collect transient occupancy taxes, comply with sanitary rules, and the like failed to establish pervasive regulation.[287]

This analysis does not follow from previous applications of the closely regulated industry exception. None of the cases in which the Court applied the exception expressed any "danger" or "risk to public welfare" requirement; rather, they evaluated whether the degree of government involvement in an industry was sufficient to qualify as pervasive and then identified a substantial government interest.[288]

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[281] *See, e.g.*, Airbnb, Inc. v. City of New York, 373 F. Supp. 3d 467, 474, 490 (S.D.N.Y. 2019) (explaining that New York ordinance required monthly reports and left the city agency without "discretion as to the information that the booking service is required to produce").

[282] *Patel*, 576 U.S. at 426.

[283] *Id.* at 426–28.

[284] *Id.* at 424.

[285] *See* Airbnb, Inc. v. City of New York, 373 F. Supp. 3d 467, 485 (S.D.N.Y. 2019).

[286] *Patel*, 576 U.S. at 424.

[287] *Id.* at 424–25. *But see id.* at 432–36 (Scalia, J., dissenting) (arguing that these laws met the test to establish a closely regulated industry).

[288] *See* New York v. Burger, 482 U.S. 691, 706–08 (1987) (determining that automobile junkyards were pervasively regulated and then finding substantial government interest in preventing motor vehicle theft); Donovan v. Dewey, 452 U.S. 594, 602, 606 (1981) (finding "substantial federal interest in

Moreover, although the Supreme Court has only recognized four industries that fell within this exception, other lower courts have found that the exception applied to a much wider range of businesses, from daycares to funeral partners and from gem dealers to rabbitries.[289] Taking into account this wider jurisprudence of closely regulated industries in the lower courts, it is hard to say that the common thread is that these industries were particularly dangerous.

Courts could instead return to the pre-*Patel* approach that considered the *comprehensiveness* and *specificity* of the regulations governing an industry, as well as the *necessity* for a warrantless search regime in furthering substantial government interests, in determining whether the analysis for "closely regulated industries" applies to a search. Under this approach, courts would not need to compare an industry with previous decisions to determine whether the new case posed more or less of a risk to the public welfare, avoiding the kind of apples-and-oranges comparison that results when mine safety regulations are placed side-by-side with hotels. And by adopting more neutral, less historically-oriented criteria, courts would have an easier time applying the analysis to new business models and industries, such as home-sharing or even data storage, that are difficult to analogize with historical examples.

One line of cases centered on New York City's taxi industry suggests how the exception might work for local data reporting requirements. In *Statharos v. New York City Taxi & Limousine Commission*,[290] the Second Circuit upheld New York City's financial disclosure requirements for taxi companies, reasoning that the city "pervasively regulated" the industry because "taxis are an important part of the public life of the City and have a City-granted monopoly on providing a crucial service."[291] The TLC subsequently amended its rules to require cabs to install GPS devices and other technology that would automatically track trip distances, payment information,

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improving the health and safety conditions in the Nation's underground and surface mines" and explaining that "it is the pervasiveness and regularity of the federal regulation that ultimately determines whether a warrant is necessary to render an inspection program reasonable under the Fourth Amendment"); United States v. Biswell, 406 U.S. 311, 312–13, 315–16 (1972) (explaining that firearms were a "pervasively regulated business" and recognizing that federal efforts to prevent violent crime and regulate firearms was "undeniably of central importance"); Colonnade Catering Corp. v. United States, 397 U.S. 72, 75 (1970) (explaining context of extensive regulation of liquor establishments and government interest in collecting liquor taxes).

[289] *See* cases cited *supra* notes 193-198.

[290] 198 F.3d 317 (2d Cir. 1999).

[291] *Id.* at 324.

and starting and ending locations.[292] When cab drivers challenged these new rules as unreasonable searches, courts repeatedly held that the industry was pervasively regulated and that drivers had diminished expectations of privacy, and that the reporting requirements were therefore reasonable.[293]

Although the courts did not specifically apply *Burger*'s three-prong test, instead holding that the government's interests outweighed the drivers' privacy interests,[294] the result would likely be the same had they done so. First, New York City's interests in regulating traffic and taxi locations in a congested urban space are substantial. Second, although the city had achieved this regulation without GPS in the past, it had also previously required drivers to manually fill out forms indicating vehicle locations and trip times in the past—the new technology was a continuation of a preexisting, and arguably necessary, requirement.[295] Finally, because drivers knew about the GPS data collection once the new technology was installed, and because the collection occurred without any discretionary decisions from TLC officials, the provision gave an adequate substitute for a warrant.

To some, extending the closely regulated industry exception in this way raises the specter that "a narrow exception [will] swallow the rule" of the administrative search doctrine.[296] On this view, the exception seems circular: an industry is pervasively regulated if the level of government regulation rises to a certain level of pervasiveness. Yet this is another way of saying that determining pervasiveness presents a difficult line-drawing problem. Regardless of how that line is drawn, the *Patel* Court's measure—dangerousness and the risk to public welfare—fits poorly with its prior reasoning and invites incoherent comparisons, such as whether a motel is as dangerous as an automobile junkyard.

In the context of discretion-less local data reporting requirements, the *Burger* elements of a substantial government interest, necessary means, and adequate substitute for a warrant resemble the general administrative search doctrine.[297] Recall that an administrative search must have a valid interest unrelated to

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[292] *See* El-Nahal v. Yassky, 993 F. Supp. 2d 460, 462–63 (S.D.N.Y. 2014), *aff'd*, 835 F.3d 248 (2d Cir. 2016).

[293] *See id.* at 465; Buliga v. N.Y.C. Taxi & Limousine Comm'n, No. 07 CIV. 6507 (DLC), 2007 WL 4547738, at *2–3 (S.D.N.Y. Dec. 21, 2007), *aff'd sub nom.* Buliga v. N.Y.C. Taxi & Limousine Comm'n, 324 F. Appx. 82 (2d Cir. 2009); Alexandre v. N.Y.C. Taxi & Limousine Comm'n, No. 07 CIV. 8175 (RMB), 2007 WL 2826952, at *9–10 (S.D.N.Y. Sept. 28, 2007); Carniol v. N.Y.C. Taxi & Limousine Comm'n, 975 N.Y.S.2d 842, 848–49 (N.Y. Sup. Ct. 2013), *aff'd*, 126 A.D.3d 409 (N.Y. App. Div. 2015).

[294] *See, e.g.*, *Buliga*, 2007 WL 4547738, at *3.

[295] *See Alexandre*, 2007 WL 2826952, at *3.

[296] City of Los Angeles v. Patel, 576 U.S. 409, 424–25 (2015).

[297] *See* New York v. Burger, 482 U.S. 691, 703 (1987).

crime control, a limited scope, and an opportunity for pre-compliance review.[298] As previously explained, I believe that courts should conceive of the scope inquiry in terms of the relevance and specificity of data requests,[299] and that they should conceive of pre-compliance review in a manner that accounts for the programmatic, regularized nature of data reporting.[300] Thus, for both analyses, the "means" inquiry should focus on the tailoring of a data reporting requirement to a government interest, and the regularization of the data reporting should provide adequate notice to substitute for a warrant.

Another objection might be that, even though a government search of a closely regulated industry requires a showing of a "substantial" interest, this inquiry is too open-ended, and that a court would be able to find a substantial interest for almost any regulatory scheme. But this objection also applies to the general administrative search doctrine, which also considers whether the government conducts a search for a legitimate interest unrelated to crime control.[301] Though courts have tended to evaluate government's interests leniently in this context,[302] they have—albeit occasionally—found that the government interest was indistinguishable from law enforcement.[303] A full accounting of the problems courts have faced in identifying non-law enforcement interests lies outside the scope of this Article, although I will briefly discuss it in the Conclusion.[304] Here, it suffices to observe that the problem is not unique to the closely regulated industry exception. While traffic management, housing availability, and building safety may be substantial interests for local governments, government regulation of other industries involving local data collectors may not.

CONCLUSION

Data-intensive businesses that operate at the local level present a governance challenge. Short-term rentals affect housing stock; e-scooters crowd sidewalks; ride-hailing vehicles impact traffic and mobility. But the information that cities would use in order to

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[298] *See Patel*, 576 U.S at 420; See v. City of Seattle, 387 U.S. 541, 544–45 (1967).

[299] *See* Section III.A, *supra*.

[300] *See* Section III.B, *supra*.

[301] *See* City of Indianapolis v. Edmond, 531 U.S. 32, 47–48 (2000).

[302] *See* Slobogin, *supra* note 149, at 1727–28 (collecting cases where Supreme Court found government interest distinguishable from crime control and critiquing this approach).

[303] *See id.* at 1728 (collecting cases where Supreme Court found government interest to be indistinguishable from crime control).

[304] *See* Conclusion, *infra*.

regulate these activities are held by private actors: the businesses whose services enable the sharing economy.

This Article has traced the outlines of the governance challenges and demonstrated that if cities attempt to access this data through reporting requirements, they face a high Fourth Amendment hurdle. The administrative search doctrine, which is the dominant framework for analyzing local data reporting provisions, requires that searches have a legitimate government purpose unrelated to law enforcement, a tailored scope, and an opportunity for pre-compliance review.[305] But courts have been too willing to focus on the sheer scale of a search in invalidating data reporting provisions, and they have had difficulty translating the concept of pre-compliance review into the context of the regular, automatic information sharing contemplated by local ordinances. Though the "closely regulated industry" exception might provide a way out of these problems, courts have been reluctant to apply the exception to new, data-intensive industries.

Three changes could help adapt administrative searches to local data reporting laws in a manner that both recognizes the distinctly local interests at play while protecting privacy rights. First, in addressing the permissible scope of a search, courts should focus on the relevance of the information sought to the governmental purpose, as well as the specificity of the demand, rather than the sheer scale of the search. Second, for the regularized and discretion-less information collection contemplated by local data ordinances, courts should hold that the opportunity for pre-compliance review must be present before a business's first reporting obligation, but it need not be present before each transfer of data. Finally, courts could extend the closely regulated industry exception to cover industries that are pervasively regulated, and where the law offers no opportunity for on-the-ground officials to exercise discretion, as is the case for local data reporting ordinances.

The "government purpose" prong of the administrative search doctrine, however, leads to even more questions about how governments handle data. Home-sharing and micromobility, which directly implicate traditionally localized governance schemes for land use and transit,[306] are easier cases for local data reporting laws. But how should courts determine what constitutes an adequate non-law enforcement purpose for local laws that involve different industries? Are there ways to ensure that the information that government collects for one purpose will not be used for another purpose—that data used to inform local transit policy will not be given to police to track individuals' movements?

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[305] *See* City of Los Angeles v. Patel, 576 U.S. at 420; See v. City of Seattle, 387 U.S. at 544–45.

[306] *See* Part I, *supra*.

I do not intend to fully resolve these questions in this Article, but I would tentatively suggest two places to start. First, local governments could enact data laws that determine how a city handles data across all city activities. As G. S. Hans has observed, such a policy could include the Fair Information Practice Principles ("FIPPs"), a longstanding series of organizing principles for data management that encompasses use limitations, security provisions, and accountability.[307] Similarly, the federal Privacy Act of 1974 requires agencies to specify the statutory basis of an action that collects individuals' private information, limit their information collection to the statutorily identified purpose, and implement safeguards for information security.[308] While a "local" Privacy Act may not completely address the concerns of those leery of cities' data collection, the FIPPs and the federal experience can provide a framework that local governments can use as a starting point.

Second, if we begin to imagine the government's use of data as an "information fiduciary,"[309] rather than simply as a law enforcement entity or an investigator, then we might better understand how cities can use technology, as well as what limits the law should place on that use. Jack Balkin has recently used this term in describing online service providers to indicate that because of the particular power these companies have with users, the information they hold, and the trust that the users place in them, then the traditional fiduciary duties of care and loyalty should extend to their treatment of users' information.[310] Yet, this concept is flexible, and it can extend to other entities—including government.[311]

Local governments arguably act as information fiduciaries when they enact a data reporting requirement. Like Balkin's online businesses, local governments hold both users' information and exercise power in electing how to use that information. Individuals who participate in an industry subject to a data-reporting requirement, in turn, place trust in the government to use the information responsibly and in their best interests. If a local agency shares that data with another actor or uses it for a purpose not contemplated by the law authorizing the reporting scheme, then

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[307] *See* Hans, *supra* note 158, at 30–36; *see also* Paul M. Schwartz, *Preemption and Privacy*, 118 YALE L.J. 902, 907–08 (2009) (discussing history and components of FIPPs).

[308] 5 U.S.C. § 552a(e) (2018).

[309] *See* Jack M. Balkin, *Information Fiduciaries and the First Amendment*, 49 U.C.D. L. REV. 1183, 1186 (2016).

[310] *See id.* at 1205–09.

[311] *See* Kiel Brennan-Marquez, *Fourth Amendment Fiduciaries*, 84 FORDHAM L. REV. 611, 649 (2015).

individuals may have a claim that the agency breached a duty of care or loyalty to citizens.[312]

These questions about determining the appropriate purposes for local government's data collection are important, but the Fourth Amendment will still provide the legal framework needed to analyze local policies. It shapes how courts and litigants understand local reporting regimes by interrogating the government interests in a search, the tailoring of the search, and the procedural protections available. Unless courts update the administrative search doctrine, however, it will continue to undermine local governance efforts without providing significant privacy benefits.

[312] *See* Craig Campbell, *Imagining Municipalities as Data Fiduciaries*, OXFORD INTERNET INST. at 2–4 (July 30, 2020), https://zenodo.org/record/3969030#.X01jQ5NKhR2.