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Author Moran, Marcel E

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Marcel E. Moran, University of California, Berkeley

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Authorized Vehicles Only: Police, Parking, and Pedestrian Access in New York City

Transportation Research Interdisciplinary Perspectives (2023)

Marcel E. Moran

University of California, Berkeley Department of City and Regional Planning moranm@berkeley.edu, Berkeley, CA, USA

Sidewalks and crosswalks do not benefit pedestrians if they are blocked by automobiles. In New York City, local media have documented that cars outside of law-enforcement offices routinely park on sidewalks and in crosswalks. This study systematically and longitudinally pursues this topic by tracking the geographic extent of this obstructive parking via in-person observation of the streets surrounding all 77 New York Police Department (NYPD) station houses, across all five boroughs. Combined with review of historical street imagery, this approach reveals widespread and longstanding parking on sidewalks, and to a lesser extent, in crosswalks. Of 77 NYPD station houses, 70 (91%) exhibited parking of at least one of these kinds, with sidewalk parking often extending along the entire block (and not simply in front of station houses), on adjacent blocks, and on both sides of the street. This renders many sidewalks impassable - forcing pedestrians into traffic - and in many cases directly abuts residences and businesses, curtailing access to such destinations. Longitudinally, such obstructive parking was present across 82% of 703 streetimagery data points, indicating this has largely become the default (and not occasional) use of adjacent sidewalks. In-person observation also demonstrated other ways this parking has had negative effects surrounding NYPD station houses, including double parking, obstruction of bus and bike lanes, and blocking of fire hydrants. These findings broaden the study of pedestrian accessibility and safety beyond the quality and design of sidewalks and intersections, to include chronic automotive obstruction, and indicate that parking behavior surrounding public-sector offices, if left unchecked, significantly degrades walkability.

Keywords: Parking, Pedestrians, GIS, Planning Figures: 6 Tables: 1 Competing Interests: None to Declare

I. Introduction

Sidewalks and crosswalks serve little purpose for pedestrians if they are routinely obstructed by automobiles. In New York City, local journalists and transportation advocates have drawn attention to this occurring, particularly in certain settings. Specifically, there is consistent photographic evidence that streets surrounding New York Police Department (hereafter, NYPD) offices are replete with cars parked on the sidewalk and within crosswalks. Though clearly problematic for pedestrians and abutting residents and local businesses, this type of parking behavior has not been studied systematically – both in terms of its geographic extent, and how long it has occurred.

Streets adjacent to NYPD buildings represent an ideal case in which to study obstructive parking. First, NYPD is local in nature – part of the New York City government, which avoids the issue of local-state-federal relations. Second, these 'station houses' (the local term for field offices) are spread throughout the city, and not confined solely to Manhattan or dense commercial districts. This allows for analysis of parking in a range of neighborhoods, which vary in density, street types, and surrounding land uses. Moreover, law enforcement is particularly poignant to consider in the context of this topic. First, police in the United States receive high levels of public scrutiny (Westervelt 2021), though this attention is rarely focused on their transportation behavior. Second, given police are tasked with the bulk of traffic enforcement in America, it is uniquely relevant if police themselves are behaving in a manner that might otherwise draw enforcement actions. Third, this focus takes seriously the work of those who have chronicled this behavior near NYPD station houses for years, and seeks to move from isolated descriptions to a systematic and longitudinal understanding of this phenomenon citywide.

At the outset, it is important to reference how obstructing pedestrian infrastructure (and the street generally) with automobiles is categorized by traffic enforcement in New York City. Posted municipal violation codes include the following (see **Table 1**):

Code	Description	Fine
51	Stopping, standing, or parking on a sidewalk.	\$115
50	Stopping, standing or parking in a crosswalk. Note: Crosswalks are not always identified by painted street markings.	\$115
45	Stopping, standing or parking in a traffic lane; or if a vehicle extends more than 8 feet from the nearest curb, blocking traffic.	\$115
48	Stopping, standing or parking within a marked bicycle lane.	\$115

Municipal Violation Codes, New York City

("Violation Codes, Fines, Rules & Regulations" 2022)

Importantly, such behavior often coincides with the use of what are called parking placards (officially 'restricted parking permits'), which are paper documents that indicate the driver of the private car in question works for the NYPD. Generally, such placards allow automobiles to be parked in spots designated for NYPD personnel. However, in common practice drivers use placards to park in a range of other ways, including on sidewalks and in crosswalks. Critically, nothing in the New York City Administrative Code regarding placards issued by NYPD (§14-183) override the municipal codes listed above, and the NYPD Patrol Guide explicitly notes this distinction as well. For this reason, this study tracks such obstructive parking regardless of the presence or absence of a placard.

New York City also represents an ideal case in which to study sidewalk and crosswalk accessibility due to its distressing upward trend of pedestrian fatalities (Kuntzman 2022a). Indeed, this comes in spite of the city setting a "Vision Zero" goal of eliminating traffic deaths, and its

own Street Design Manual stating that: "by focusing on pedestrians in the street design process, the city has made walking – New Yorker's primary mode of transportation – safer, easier, and more comfortable" (Feuer et al. 2020). With this context, this study chronicles the extent to, and chronicity of these parking behaviors surrounding all NYPD station houses, which can potentially inform enforcement reforms to improve walkability and safety. More broadly, as the demand for the use of sidewalks, curbs, and adjacent lanes increases in cities (including from ridehailing, delivery services, and shared bikes and scooters), this study is also relevant for planners who must consider how to ensure pedestrians do not suffer from the encroachment of a range of vehicles, including automobiles.

II. Literature Review

This paper considers the intersection of two issues – parking and public-employee behavior – both of which have been considered at length by scholars separately. As to the former, there have been a number of studies documenting drivers parking in ways that violate established regulations. Indeed, drivers often avoid paying at parking meters (Petiot 2001), park on residential sidewalks (Shoup 2014), and in bike lanes (Moran 2020). It is perhaps not surprising that drivers behave in such ways, given so often there are few penalties for doing so. However, evidence that speeding and red-light cameras can reduce dangerous driving (Wilson et al. 2010; Graham et al. 2019; Bhat and Martinez 2022), indicate that increased enforcement could also decrease parking that obstructs pedestrian infrastructure.

Research on parking connected in some way to government has generally occurred in the context of privileges provided to persons with disabilities. For context, many American states issue physical placards which allow persons with disabilities to park in designated spots close to venue entrances, and (in some cases) be exempted from parking fees at metered spots (Manville and

Williams 2018). Both media and academic investigations have found such programs rife with abuse, from college athletes forging doctors' notes to receive placards (Berthelsen 1999), to the use of placards of deceased individuals (Cunha 2016). As Shoup points out (2018), the ease with which states give out disability placards, combined with the financial benefits that can be recouped, create fertile conditions for widespread fraud. Disability-placard scandals not only deprive those who actually need such parking spots and prevent cities from collecting parking revenue, but they also undermine faith in such programs more broadly (Favuzzi 2015; Dorfman 2020). Analogously, if sidewalk and crosswalk parking is associated with certain public services, faith in government generally and offending-agencies specifically could be undermined.

Searches within academic databases (Google Scholar, EBSCO, JSTOR) uncovered few studies that deal with parking behavior that negatively affects other travelers (outside of disability placards). However, one article took advantage of a unique natural experiment: until 2002, representatives to the United Nations headquarters in Manhattan were provided 'diplomatic immunity' in terms of New York City parking tickets. Plainly, cars with diplomatic license plates could violate nearly all parking rules and faced no consequences for failing to pay resulting fines. Fisman and Miguel found, intriguingly, that representatives from countries with generally higher levels of corruption were more likely to violate parking regulations (2007). Perhaps more importantly, they also documented that the sunsetting of this privilege – now such plates can be rescinded if three tickets are left unpaid – drastically decreased said parking behavior.

As noted above, parking which blocks pedestrian infrastructure surrounding government buildings has been consistently covered by New York City media, as well as by transportation advocates. Mentions of such behavior date back to at least the 1980s (Boorstin 1987), and the specific issue of NYPD personnel as the culprits was described in a 1995 *New York Times* article:

They park on sidewalks and hide fire hydrants with their cars. They angle where they should parallel and turn normal streets into obstacle paths. They never seem to feed their parking meters, they rarely get tickets and they run red lights. Yes, they are New York City police officers, and yes, they do what most New Yorkers cannot. They drive to work and park at will just about anywhere they like. (Purnick 1995; see also Haberman 1997; Hu, 1999)

Television news stations have done the simple, but powerful practice of spotting cars parked on the sidewalk (as well as in front of fire hydrants), and confronting the drivers and nearby law enforcement. A single Twitter account – named "Placard Corruption" – has documented obstructive parking in New York City since 2016, amassing over ten thousand followers and submitting hundreds of associated complaints to the city's 311 system. Indeed, a map of publicly-submitted parking complaints visualizes that alleged violations cover the city's five boroughs, with more than 28,000 submitted between May, 2017 and June, 2022 alone ("Placard Abuse" 2022). This issue, specifically surrounding NYPD station houses, has even risen to the level of community boards, such that many across New York City have reported their streets being inundated with sidewalk parking (Kessler 2022), demonstrating neighbor disapproval. Furthermore, an advocacy group, Disability Rights New York, filed a lawsuit in 2022 against NYPD alleging failure to enforce parking laws, resulting in significant mobility barriers, which the U.S. Department of Justice largely agreed with in an accompanying brief (Ndonwie 2022; Pisoni 2022).

With this context, it is important to consider how New York City's political leadership and municipal government has responded to complaints regarding such parking. Bill de Blasio, who served as the city's Mayor from 2014 to 2021, announced a range of reforms for public employees, including the use of digital-barcode scanners for traffic-enforcement officers to verify dashboard

placards (Colon 2021). Though, many of these initiatives have been delayed or halted by the departments charged with carrying them out (Meyer and Hicks 2021), and de Blasio also disbanded an NYPD unit explicitly tasked with ticketing cars abusing placards (Cuba 2020). It is questionable whether de Blasio's successor, Mayor Eric Adams (whose term began in 2022) will deter such parking; during his time as Brooklyn Borough President, Adams' office staff was known for parking on pedestrian plazas (Gonen 2019). When confronted by constituents regarding this, he argued that he was unwilling to do anything about it because other public employees were *also* parking in such ways elsewhere in the city (Duggan 2019). This is not to say that all politicians in New York support the parking status quo; city council members have called for both stricter enforcement of existing regulations (Kuntzman 2022b), and further reforms (Meyer 2022).

Though this study is bounded to New York, parking issues and public employees are of course not specific to this city, or the United States. For example, in Ireland the national police force was embroiled in a scandal originating from a whistleblower complaint which revealed a number of parking fines were being inappropriately cancelled by officers (Mulcahy 2021). Indeed, the purpose of this study is to use New York as a case to expand the literature on parking which degrades the pedestrian environment, particularly in the context of law enforcement. A straightforward hypothesis for why this type of parking occurs is a sense of impunity among NYPD personnel, who wish to avoid the time and/or money-intensive search for parking others must embark on in New York City. This fits squarely into a definition scholars Sayed and Bruce have offered of police corruption: "any illegal conduct or misconduct involving the use of occupational power for personal, group, or organizational gain" (1998).

This study also broadens research on pedestrian access, which generally has focused on fixed infrastructure, such as sidewalk, intersection, and block-level design (Hess et al. 1999; Kim,

Choi, and Kim 2011). Though such work has at times mentioned parked cars as obstructions, this has not been its focus (Kelly et al. 2007). Indeed, more recently *mobile* sources of pedestrian obstructions have gained broader notice given the introduction of shared bike and scooter schemes (Fang et al. 2018). To this point, researchers who examined commercial streets in five U.S. cities found that automobiles were parked in ways that hindered other travelers at far higher rates than 'micromobility' vehicles (Brown et al. 2020).

Lastly, employing Google 'Street View' to consider the longitudinal nature of sidewalk and crosswalk parking builds off previous use of such imagery in urban research. Indeed, Street View – which is taken roughly at eye-level and dates back over a decade on most New York City streets (Olanoff 2013) – has been used to track neighborhood change (Hwang and Sampson 2014), growth of bicycle networks (Moran 2022), and identification of pedestrian infrastructure, such as crosswalks (Li et al. 2022). This resource is particularly suitable for this study because all historical street imagery captured by Google is available online (Shet 2014), meaning one can probe whether sidewalk and crosswalk parking have only recently occurred, or date back many years. Of course, this means that measurements of the chronicity of such parking are inherently conservative, in that they are limited to the earliest-available Street View image, and not necessarily the first instance of such parking.

III. Materials and Methods

This study evaluates parking surrounding NYPD station houses in terms of its obstruction of pedestrian infrastructure, via in-person observation and review of historical street imagery. First,

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streets adjacent to all seventy-seven¹ NPYD station houses were visited in person, in order to document vehicles parked on sidewalks (fully or partially), and/or in crosswalks (see Figure 1).



Figure 1: Examples of cars parked fully on the sidewalk (left, 70th Precinct Station House) and within crosswalks (right, 110th Precinct Station House). Photos by the author.

In-person visits were conducted during the month of November, 2022, on weekdays between 7 AM and 6 PM. Each station house was visited a single time during this month, and the time of each observation varied across these daytime hours. Direct observation took place entirely in the public right of way (on sidewalks directly adjacent to these buildings); no station house was ever entered. In addition, no personnel (NYPD or otherwise) at any site were ever contacted during these visits – the goal was documentation and subsequent analysis, not verbal inquiry. This differs significantly from the approach taken by some transportation advocates and journalists, which can include directly questioning drivers or nearby employees (M. Wilson 2008). Parking of these kinds was recorded for both marked NYPD vehicles, as well as off-duty, unmarked cars. The presence or absence of paper placards was not accounted for, given it is not obvious how to determine their

¹ The numbering for NYPD Precincts and Station Houses is not sequential (e.g. 1, 2, 3), which is why their names go higher than 77 (La Gorce 2017).

authenticity, and because even authentic placards explicitly do not allow for sidewalk or crosswalk parking. Though there are situations in which official police vehicles may need to park in ways that obstruct pedestrian infrastructure, such as when responding to emergencies, that is a separate issue from the routine, long-term parking of such cars outside of station houses. Indeed, the cars observed outside of station houses were not idling or occupied, and the sirens (of marked vehicles) were not in use.

In terms of physically bounding in-person observations of obstructive parking, the full block where each station house is located was included, as were curbs across the street from station houses, and immediately-adjacent block faces. This was due to the fact that some station houses are located on corners, and others take up entire blocks, meaning they have frontages on multiple streets (each of which were observed). Many streets adjacent to station houses feature signs which read "Authorized Vehicles, Police Department," though these often sit beyond the borders of a station house itself. These signs indicate that on-street parking must be reserved for vehicles affiliated with NYPD, but they do not suspend or supersede municipal codes forbidding sidewalk or crosswalk parking. Indeed, the NYPD Patrol Guide advises desk officers to: "Inspect all parking facilities and streets/sidewalks around command to ensure there are no Department vehicles or vehicles displaying Restricted Parking Permits parked illegally (e.g., obstructing bicycle lanes/sidewalks, in front of fire hydrants, in bus stops, etc.)" In addition, the sidewalk and crosswalk parking observed during this study (described below) was in no way bounded to the zones within these signs, and often stretched far beyond.

Complementing in-person observation, Google Maps was leveraged to determine to what extent sidewalk and crosswalk parking have occurred outside each station house historically. This entailed manual review of Street View imagery captured adjacent to station houses each time they were collected, creating 703 archival data points across the 77 station houses. This process was limited to the earliest image available for each; across New York City, Street View was most often first acquired between 2007-2010. Station houses were imaged by Street View on average nine times between 2007 and 2022. Combined, this methodology creates two categories of data: inperson observation during the fall of 2022, and manual evaluation of historical street imagery in the same locations for as many years prior as exist. This also allows for consideration of historical trends, for example, has sidewalk and/or crosswalk parking increased in number, decreased, or remained the same? In addition, satellite imagery of station houses drawn from Google Earth was also reviewed to better understand how parking on sidewalks extends beyond the footprint of station houses.

IV. Results

In-person observation of streets surrounding every NYPD station house, as well as review of historical street imagery indicates widespread parking on sidewalks, and to a lesser extent, within crosswalks. At least one of these two kinds of parking were observed at 70 of 77 total station houses (91%) at least once across all observation points, including in-person visits and historical imagery. By far the most common was cars parked with part or all of the vehicle up on the sidewalk (observed at 69 of 77 station houses in person, and 67 historically), impeding the flow of pedestrians, and in many cases completely blocking them (see **Figure 2**). Parking in pedestrian crosswalks was observed at 36 of 77 station houses in person, and 41 historically. When in-person visits were broken down into three time categories (morning, 7-11 AM; midday, 11AM-2 PM; afternoon, 2 PM-6 PM), there were no differences in terms of the percentage of sidewalk or crosswalk parking observed.

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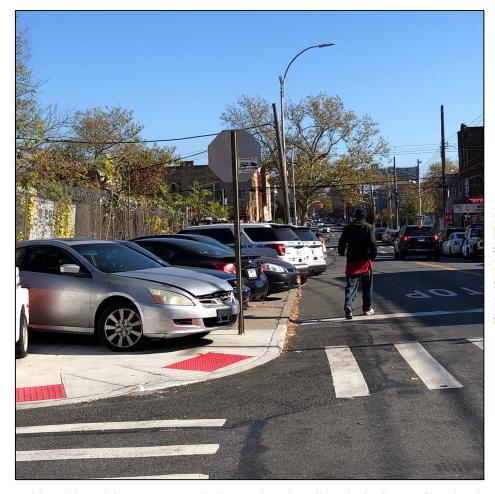


Figure 2: Example of cars parked on the sidewalk surrounding the NYPD 75th Precinct Station House, rendering it impassable and forcing a pedestrian into the street. Photo by the author.

Sidewalk parking was not solely restricted to directly in front of station houses, but often extended along entire blocks, on the opposite side of the street, and even adjacent blocks in either direction. Indeed, for 55 station houses (71%), sidewalk parking occurred on at least two different streets. Complementing in-person observation and historical street imagery, satellite imagery of station houses can help illustrate the extent to which sidewalk parking extends beyond station-house footprints (see **Figure 3**). This entails that a range of adjacent neighbors (e.g. homes, businesses, parks) incur sidewalk parking at their doorsteps as well, impeding access. The average number of block faces with sidewalk parking surrounding each station house was 2.2, calculated from satellite imagery.



Figure 3: Satellite imagery of the NYPD 75th Precinct Station House (labeled) and surrounding blocks, which demonstrates that sidewalk parking (marked in purple) often occurs beyond the footprint of the building itself. Image drawn from Google Earth.

Historical street imagery allows for analysis of the chronicity of this obstructive parking. This longitudinal review – evaluating all Google Street View observations of the blocks surrounding each station house as far back as are available – demonstrates that sidewalk and crosswalk parking are chronic, being present for an average of (at least) 12 years prior (see **Figure 4**). Specifically, across the 703 unique data points (an average of nine Street View observations per station house between 2007-2022), sidewalk or crosswalk parking was visibly detected in 579 of them (82%). As noted above, this metric is limited to the availability of the earliest Street View images (generally between 2007-2010), and does not mean this represents the beginning point of such parking. This approach also allows analysis of if obstructive parking varied by year: there were no clear trends in terms of sidewalk and crosswalk parking between 2007 and 2022. These types of

parking simply remained high (never dropping below 79% or rising above 91% across the date range.



Figure 4: Example of parking obstructing a sidewalk by a playground adjacent to the NYPD 30th Precinct Station

House in Manhattan, tracked longitudinally via Google Street View's historical imagery.



Figure 5: Map of NYPD Station Houses, color-coded by presence of sidewalk parking.

Mapping the geographic extent of sidewalk and crosswalk parking across all NYPD station houses illustrates the widespread nature of this behavior, from dense Manhattan neighborhoods to the outer (largely suburban) reaches of the Bronx, Brooklyn, Queens, and Staten Island (see **Figure 5)**. On a borough basis, Manhattan had sidewalk and/or crosswalk parking at 17 of 22 station houses (77%), Brooklyn at 23 of 23 station houses (100%), Queens at 15 of 16 station houses (94%), the Bronx at 12 of 12 station houses (100%), and Staten Island at 3 of 4 station houses (75%).

In-person observation of streets surrounding all NYPD station houses also revealed other issues in terms of transportation access and safety. For example, double parking was observed outside a number of station houses, at times blocking bus and bike lanes (see **Figure 6**). In addition, 35 fire hydrants were observed blocked by cars, which increases the potential danger of fire to adjacent buildings. Moreover, a number of cars severely damaged in crashes, with exposed jagged metal, were left on the sidewalk outside of station houses. Likely due to such sidewalk parking, certain streets by station houses featured moveable posts and fences in front of neighboring residences asking for driveways not to be blocked. Both in-person observation and historical street imagery indicate obstructive parking is not confined solely to marked police vehicles, though a specific 'on-duty' vs. 'off-duty' breakdown was not calculated (given some percentage of vehicles are likely unmarked police cars, used for official duties).

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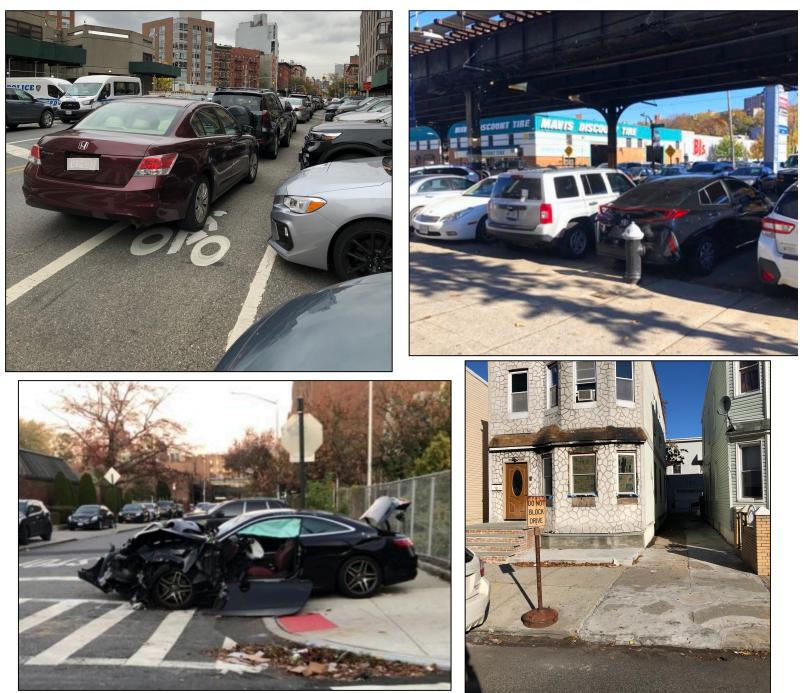


Figure 6: Vehicles double parked outside of the 28^{th} Precinct Station House (top left), obstructing fire hydrants outside the 50^{th} Precinct Station House (top right), and left in damaged condition on the sidewalk next to the 70^{th} Precinct Station House (bottom left). A sign posted by a resident asking drivers not to block the driveway next to the 67^{th} Precinct Station House. Photos by the author.

The most common effect of such parking was a narrowing of the sidewalk for which pedestrians can walk, or its complete blockage. This most often occurred directly in front of station

houses, which also reduces the ability of pedestrians to reach NYPD buildings. Sidewalk parking occurred on streets where parallel parking was allowed, as well in 'no-standing zones,' or where no parking is allowed. Similarly, crosswalks were either partially or fully blocked, forcing pedestrians to walk around parked vehicles and/or cross in non-designated areas.

V. Discussion & Conclusion

V.I Policy Implications

In-person observation and review of historical imagery of the streets surrounding New York Police Department station houses reveal widespread parking on sidewalks and in crosswalks, which significantly degrades the pedestrian environment. This does not solely occur directly in front of NYPD station houses, but often stretches for multiple blocks, and on both sides of the street. Furthermore, parking in these ways is longstanding, and dates back at least 12 years on average (based on availability of Google Street View). That such parking is largely chronic demonstrates that significant pedestrian obstructions have become the *default* condition of these streets, rather than occasional. This creates profound challenges for those with mobility impairments, those who use mobility aids, those transporting goods in personal shopping cards, and parents with strollers. Aside from the strictly-transport implications, it also reduces the ability for the sidewalk to serve other purposes, such as room for street trees, and play space for children.

These findings broaden the academic study of parking and pedestrian access to include deliberate, repeated obstruction of sidewalks and crosswalks surrounding law-enforcement offices. This raises several transportation-planning issues, both local to New York City and to municipalities globally. First, law-enforcement personnel likely represent a group of drivers prone to use their positions of authority in order to park in a manner that degrades streets for neighboring pedestrians, residents, and businesses, which is otherwise not tolerated among the driving public.

Second, this kind of parking may be geographically concentrated, such as on blocks surrounding police stations. Given this, the most obvious policy implication is the enforcement of existing parking regulations, and/or clarification of those regulations for police personnel. The type of parking documented here would likely be reduced substantially if traffic-enforcement officers ticketed and towed such vehicles. In addition, increasing existing penalties for certain behaviors – such as blocking crosswalks – could further deter such behavior.

Another potential policy response is to adapt and broaden New York City's truck-idling monitoring program to parking. Currently, individuals who capture video evidence of trucks idling for a certain length of time receive a portion of the fines collected by the city (M. Wilson 2022). Indeed, a growing number of municipalities are considering mechanisms for citizens to directly report similar violations and receive financial rewards (Benoit 2020; Stark 2022), and a bill that would expand New York's program to parking has been introduced in the City Council (Akinnibi 2022). Of course, this approach may prove unpopular given participants could fear documenting NYPD personnel might expose them to unwanted repercussions. Indeed, there have been instances of New York City residents receiving threatening phone calls following the submission of traffic-violation reports to the 311 system (Coburn 2022).

One potential reaction to the sidewalk and crosswalk parking documented here is simply that automobile parking is inadequately supplied for NYPD staff, who obviously perform important tasks and contribute to a safe and functioning city. Indeed, a 'functional' explanation for sidewalk and crosswalk parking is that it increases the parking capacity of streets surrounding station houses. There are several responses to this position. First, if more parking is needed, there are means of obtaining it beyond degrading the pedestrian environment, such as by making requests to NYPD and city leadership for the construction of parking facilities, or the designation of more on-street spots for staff. Indeed, there are a range of professions within any city that require automobiles, yet the public-policy response to this need is almost never a de facto suspension of parking rules on sidewalks and in crosswalks adjacent to those workplaces. To this point, it is not obvious that a lack of nearby parking is necessarily the cause of sidewalk parking; in-person observation indicates that many station houses include parking lots, though their capacity requires further investigation. For example, a New York City community land trust identified 73 parking lots just in Brooklyn and the Bronx that are controlled by NYPD, with many underused in terms of parking (Santos et al. 2022).

Second, NYPD personnel can of course make use of existing private-sector parking options, such as lots, garages, and metered spots. Third, like the general public, these employees can travel via non-car modes, such as by walking, biking, or riding transit (police officers in New York are provided free transit cards; Haddon 2010). Critically, the very knowledge that these employees can park in such a manner may be the reason they choose to *drive*. This supposition is supported by research on the relationship between the availability of free on-street parking and car ownership of adjacent residences in New York City – indicating a positive elasticity between the former and the latter (Guo 2013). A range of studies have highlighted how increased parking supply makes automobile travel more likely, lending motivation to potential reforms surrounding NYPD station houses (McCahill et al. 2016; Millard-Ball et al. 2022).

Beyond the direct policy responses regarding clarification and enforcement of existing parking regulations, the behavior documented in this study raises the issue of a sense of entitlement or impunity by certain law enforcement officers. This potentially requires reforming or improving community oversight of the transportation behavior occurring surrounding station houses – such as reports from NYPD leadership on attempts at deterring such behavior, and disciplinary actions

taken against chronic offenders. Consultation with local transportation and disability advocacy organizations (as well as other concerned neighborhood groups) may offer the chance at meaningful dialogue regarding the consequences of sidewalk and crosswalk parking on the daily life of neighbors, commuters, and local businesses.

In this vein, there may be lessons from the small number of NYPD station houses which did *not* feature any sidewalk or crosswalk parking, including both during in-person observation and review of historical street imagery. Of the seven station houses in this category, five are in Manhattan, which may mean that higher pedestrian volumes, or smaller street widths limit the opportunity for obstructive parking (or increase backlash when it occurs). That said, a station house in southern Staten Island and another in far-eastern Queens – much-less dense areas – also did not exhibit any sidewalk or crosswalk parking, indicating density is clearly not the only factor. Basic design adjustments, such as the installation of sidewalk-protecting bollards (present in front of the 9th Precinct station house) may also curb this kind of parking.

V.II Limitations

There are several important limitations to this study. To begin, this analysis is in part, based on the assumption that cars parked in such ways and in such locations belong to NYPD personnel. Given the geographic restriction of observations – streets abutting station houses and directly-adjacent blocks – this is likely the case for the bulk of cars observed, though there may be some unaffiliated vehicles as well. Furthermore, this study in some ways is *conservative* due to its focus on station houses. This is because there is also evidence from journalists that public employees also park on sidewalks and in crosswalks elsewhere in New York City, such as in their home neighborhoods and while running personal errands (Lee 2018). Lastly, while Google Street View is a robust

dataset, it does not go back further in time in New York City than 2007, which means the measures of the longevity of sidewalk and crosswalk parking are likely underestimates.

Like any case study, questions regarding the generalizability of New York City and its sidewalk and crosswalk parking are warranted. Though New York City's overall size and density are unique in the United States, there are multiple reasons to believe the findings here are relevant elsewhere. First, the 77 NYPD station houses are not constrained to Manhattan, or within dense sections of other boroughs. Indeed, many sit within lower-density and even suburban neighborhoods, particularly in Queens, Brooklyn, and Staten Island. Indeed, the range of urban form covered mirrors that of many other American cities, indicating similar parking issues likely exist elsewhere. Second, given the goals in the field of city planning to generally increase density and pursue compact and infill development, this study signals that the challenge of parking management will be paramount in densifying places, especially in the context of law enforcement offices. Moreover, local news articles indicate other cities, including Cleveland, Philadelphia, and Chicago exhibit similar parking behavior (Pagonakis 2023; Rinde 2019; Ronan 2014), illustrating this issue is far from constrained to New York. Finally, localized case studies are often useful in identifying problematic parking behavior, which have catalyzed research and planning reforms elsewhere, including nonpayment of parking meters, demand-responsive parking pricing, and sidewalk parking in residential neighborhoods (Pierce and Shoup 2013; Manville and Williams 2012; Popescu 2022).

Both the in-person observations and the review of historical street imagery document sidewalk and crosswalk parking at specific moments in time, and do not include the duration of such parking. That leaves out important attributes, given research by Thigpen and Willson demonstrate that parking demand changes diurnally (Thigpen 2018; Willson 2015), and because

brief parking obstructions (on the order of minutes) entail less disruptions for pedestrians than chronic ones (on the order of hours). Though, the presence of parking obstructions across 80% of all data points (in-person visits and historical street imagery) suggest such parking surrounding station houses is not ephemeral, or restricted to certain times of day.

V.III Future Research Directions

In terms of future research, there are several ways to improve and expand upon this study. First, extending this type of street observation to other government buildings in New York City would be useful in establishing how widespread or limited such behavior is. It may be especially interesting to conduct similar observations surrounding courthouses or correctional facilities, given obstructive parking in such places could add to the argument that this behavior is related to a feeling of impunity by law enforcement. Though in-person observation of streets surrounding buildings of interest is time consuming, the methods employed here are highly transferable to other locations, including the free availability of historical street imagery from Google Maps.

Second, subsequent investigations of this topic could modify and expand data-collection practices to include parking duration and more-systematic coverage across the time of day. This is not possible when using Street View, which omits time of collection, but may be possible if reviewing other archival footage. Second, related behaviors such as double parking, parking in bus and bike lanes, and blocking fire hydrants could also be incorporated in data collection, though this is more challenging given such street features are unlikely to be uniformly present outside of facilities of interest (unlike sidewalks and crosswalks). Third, it may be useful to distinguish between on-duty and off-duty vehicles that park in such ways going forward; if primarily an issue of the latter, that may provide even more evidence such behavior is not related to emergency response. In addition, interviews with NYPD personnel and other public officials could help shed light on the origin of such parking, attempts at reining it in, or other useful context. To that end, emails to multiple staff members of New York City's Department of Transportation on this topic went unanswered. It would also be meaningful to engage with affected residents, businesses, and travelers (including those with mobility impairments), to better understand the ramifications of this type of parking. For example, adjacent to the 70th Precinct station house in Brooklyn, vehicles were observed parked fully on the sidewalk in front of an office building that houses a nonprofit serving persons with disabilities (see **Figure 1**). This type of parking has occurred for at least a decade in this location, and potentially influences the ability of visitors to reach such a destination. More broadly, the longstanding nature of the obstructive parking observed across the majority of station houses could possibly even reduce nearby buildings' property values, an interesting direction to push such research.

Second, there are other kinds of problematic travel behaviors that could be worthwhile to study in the context of public employees. In addition to the placard issues mentioned above – which would be worthwhile to study in their own right given media reports of their wide misuse – there has also been growing evidence that drivers across New York City are tampering with, obscuring, and removing their license plates (Driks 2022). This behavior, explicitly against state law, allows drivers to avoid a range of transportation-related charges, including bridge and road tolls, as well as cameras which issue automated tickets for speeding or driving through red lights. This practice appears to be a more recent phenomenon in New York and elsewhere in the U.S., which has likely increased given the growing use of automated bridge and road tolls, as well as red-light and speeding cameras (Bates 2021). New York media mentions of these tactics date back to at least the 2010s (Meyer 2017), including evidence that NYPD personnel may be deliberately

obscuring the plates of their private, off-duty vehicles (Guerrero 2017). Determining an effective way to measure this practice would be an important contribution.

These kinds of parking behavior are also not only present surrounding public-sector workplaces. Indeed, the increasing demands for sidewalks (especially the furniture zone), curbs, and adjacent traffic lanes from a range of new business models and transportation options – from 'micromobility' companies to app-based delivery services to ridehailing pick-ups and drop-offs – means that the pressure to park in a manner that obstructs pedestrians is increasing. This convergence increases the importance of scholars and planners studying the pedestrian environment, and establishing policy and/or infrastructure responses to reduce it. For example, some cities install physical bollards along curbs, which can have the effect of deterring cars from parking on the sidewalk.

Overall, direct observation of the streets surrounding every NYPD station house reveals widespread parking that obstructs sidewalks and crosswalks, which in most cases date back more than a decade (at least). This expands research on problematic parking behavior beyond abuse of disability-related placards, and raises the issue of public employees taking advantage of their position to diminish pedestrian accessibility and safety. Clarity regarding and enforcement of existing parking regulations, and increased penalties could likely substantially deter and limit such practices.

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