



The Cost of Parking: A Preliminary Analysis of Parking Tickets Data in Austin, Minneapolis, and Portland

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State and local officials are starting to consider the disproportionate effects of criminal legal fines and fees on the lives of families with low incomes—especially Black, Latine, and Native American families. Although policymakers have focused mostly on court and prison fees, most individuals may interact with the criminal legal system via parking tickets, which if left unpaid can turn into lifelong financial burdens. Parking tickets serve as a way to streamline city services like plowing, accessibility to fire hydrants, and street cleaning, but research and news investigations show they can also especially harm people of color and those with low incomes (Brazil 2018).¹

Parking tickets (also called “tickets”) refer to citations issued by police officers or other government traffic officials to inactive motor vehicles for violations of local laws. In this research brief, we analyze three aspects of parking tickets: locations in cities where tickets are issued, the number and dollar amount of tickets assessed, and the types of violations for which tickets are assessed. We look at tickets between January 2018 to December 2019, and we focus on three large cities: Austin, Texas; Minneapolis, Minnesota; and Portland, Oregon. We selected these cities because of their accessible data and because they were not among the prominent places studied in fines and fees literature so far.

Our analysis shows a majority of parking tickets were issued in downtown areas, which typically have a higher density of office buildings, shops, and restaurants. This likely corresponds to the higher concentration of parking meters installed and monitored in commercial corridors. Overall, the largest contributors to parking tickets by type included expired or missing meter receipts and failure to display registration and parking in no-parking and tow-away zones. Because of data limitations, we could not determine the demographic composition of those ticketed.

Among the three cities studied, Portland had the most tickets issued in total, whereas Minneapolis had the highest number of tickets issued per resident and ticket amount per resident. After normalizing the number of tickets issued for the population sizes, we saw that Minneapolis issued over one ticket per city resident, whereas Austin issued just over one for every four city residents. Minneapolis and Portland each issued about \$37 million in parking tickets between 2018 and 2019, whereas Austin issued about \$9 million.

In Austin, we also analyzed the amount of unpaid parking tickets. Unpaid tickets can result in outstanding criminal legal debt. As of September 2022, nearly a quarter of parking tickets issued in 2018 and 2019 were unpaid. This amounts to about \$2 million in revenue that the city has not yet collected. That total is a small fraction of Austin's fiscal year 2018–19 general fund revenue (0.2 percent),² but the consequences for individuals can be huge. If a parking ticket issued in Austin is left unpaid after 30 days, the city may transfer it to a collection agency, which may increase the fine by 30 percent and tack on fees.³ We know from residents' experiences in other jurisdictions that such rules can quickly spiral into significant financial burdens, especially for those with low incomes.⁴

Because of recent government reports and news investigations, local officials in Chicago, Illinois; the District of Columbia; and Ferguson, Missouri, have implemented ticketing and administrative reforms to tackle issues arising from the inequities of fines, fees, and outstanding criminal legal debt. Several other jurisdictions have stopped the practice of suspending driver's licenses for unpaid tickets, implemented payment plans for parking tickets and amnesty programs to waive interest and late fees, and forgiven certain outstanding criminal legal debt.

Such measures may help ease current financial burdens for residents, but they may not address the root of why parking tickets issuance is higher in higher-density areas and how to implement them well. In future analyses, we aim to delve into those topics further. Better data and more research are needed to assess patterns in where parking tickets are issued and who receives them, as well as solutions to ensure equitable enforcement and collections.

Background

Why Are Parking Tickets Issued?

Regulating curbside spaces in high-density urban areas with parking meters and tickets optimizes access to desired parking and clears blockages. Meters and tickets can also ensure roadways remain clean and ensure access for emergency and commercial vehicles. Violations issued for parking reduce the amount of time cars circulate on the street searching for a parking space and allow streets with commercial shopping to have a rotation of shoppers over time (Shoup 2018). When drivers do not follow appropriate parking rules, they can impede the safe and efficient flow of traffic by preventing other vehicles, cyclists, and pedestrians from legal uses.

How Much Revenue Is Collected from Parking?

Per the US Census Bureau, state and local governments collectively raised over \$3 billion from charges for parking in 2020.⁵ This does not include parking tickets' fines and fees; it includes revenue from on-street and off-street parking meters and charges and rentals from government-owned parking lots or public garages. In inflation-adjusted amounts, state and local revenue from parking charges has grown from \$1.1 billion in 1977 to \$3.1 billion in 2020, a 167 percent increase. Between 2019 and 2020, a small 10 percent decline in revenue from parking charges occurred, likely because of the COVID-19 pandemic's disruptions. As a share of total general revenue, parking charges account for less than 0.1 percent for states and localities combined. This percentage has remained consistent over the last 40 years. Nearly all of this revenue is collected by local governments, primarily large municipalities and some special districts.

Among localities in 2020, Philadelphia raised the most from parking charges (\$265 million), followed by New York City (\$233 million), San Francisco (\$199 million), Los Angeles (\$72 million), and Minneapolis (\$71 million). Localities saw some declines in revenue from parking charges between 2019 and 2020, but those raising the most remained similar. In some states, special districts—not city-level governments—control parking administration and enforcement. These tend to rely on parking charges for all or nearly all of their revenue. Most notable among them are the Philadelphia Parking Authority and Pittsburgh Parking Authority.

Besides charging motorists at parking meters, local governments can raise further revenues by issuing parking tickets that penalize unauthorized uses. This includes, but is not limited to, ticketing those parked without paying at meters for their duration of stay, or those parked in restricted areas such as near fire hydrants, permit-only spots, or zones meant only for drivers with disabilities.

How Many Tickets Do Cities Give Out and Much Do Tickets Cost Drivers?

Prior research from cities gives us some insights on the number of parking tickets issued, the variations in ticket costs, and the amount of money localities raise from tickets. New York City issued over 6 million parking tickets in 2016, more than two for every three city residents, mostly for street cleaning (\$45 to \$65 per ticket), meter violations and parking in excess of allowed time (\$35 to \$65 per ticket), and parking in no-standing and no-parking zones (\$60 to \$115 per ticket).⁶ Chicago, Illinois, issued over 1 million parking tickets, one for every three city residents, in just the first half of 2022, which was 26 percent higher than in 2021; ticket issuance was largely for loading zone, tow zone, and traffic lane violations.⁷ Between 2015 and 2018, the average parking ticket cost in Portland, Oregon, increased from \$68 to \$80, and the city issued over 900,000 parking tickets, raising about \$70 million.⁸ And in Los Angeles, California, the city government raised over \$600 million from parking tickets over a five-year period.⁹ In most large cities, most tickets issued were in downtown areas and some other commercial corridors. Commercial delivery companies such as UPS or FedEx, accounted for a significant share of tickets; some have noted that they see these costs as expected expenses and budget accordingly for them.¹⁰

With parking tickets, looking over a multiyear period is important for two reasons: First, the number of parking tickets issued varies year to year, in part because the number of motorists vying for high-traffic spots vary and because discretion exists in ticketing practices of traffic enforcement officials. During the COVID-19 pandemic, far fewer people drove to work or for recreational purposes to downtown areas, which meant fewer motorists could be penalized (Tefft et al. 2021). In fact, many local governments, such as the District of Columbia, relaxed their enforcement practices so as to explicitly lower the financial burdens households faced early in the pandemic.¹¹ Second, there can be lags in when people pay or even receive notice of parking tickets so significant gaps can exist between the amounts of parking ticket fines and fees assessed and those fully paid within the same year.

Is Ability to Pay Factored into Parking Ticket Collections?

Parking ticket amounts do not typically account for a motorist's ability to pay. When parking tickets are not paid on time, they can incur additional fees and interest, which altogether contributes to outstanding court debt. The frequency at which parking tickets are paid, in addition to their changing ticket patterns, can make parking tickets, and all other criminal legal fines and fees as well, relatively inefficient and unreliable sources of revenue for state and local governments, especially when compared with income, sales, or property taxes. The longer a parking ticket is unpaid, the more fees can be added to the total amount, typically. If an individual cannot pay the original amount, it is unlikely they can pay an amount that has compounded over time. In municipalities where longer-term payment plans are offered, courts may charge fees for them, piling on additional penalties on those least able to pay. Outstanding debt from overdue tickets can have various nonfinancial consequences too, which include but are not limited to suspended driver's licenses, loss of voting rights, and incarceration (Menendez et al. 2019).

Some places have started adopting programs that can help take into account ability to pay and limit the amounts of outstanding tickets based on either income or on participation in a government programs. San Francisco has pioneered local criminal legal fines and fees reforms over the years and continues to offer various relief options for those unable to afford their parking tickets. For those experiencing homelessness or receiving public benefits assistance due to low incomes, the city offers social services, a one-time free removal of all open tickets on one vehicle, community services in lieu of ticket payment, removal of late penalties, or monthly payment plans.¹²

For more discussion on reforms that state and local governments have undertaken to address fines and fees inequities, see appendix A.

What Are the Equity Implications of the Enforcement and Administration of Parking Tickets?

While there has been limited literature on the distribution of parking tickets, prior research and news investigations have shown that Black families and other families with lower incomes can be disproportionately impacted by ticketing practices as well as from the resulting outstanding court debt.

In Los Angeles, California, Brazil (2018) studied the spatial relationship between where parking citations are issued and demographic composition at the neighborhood level. Their statistical analyses, which controlled for characteristics of the built environment (such as bus stops and access to schools and hospitals), concluded that the incidence of parking tickets, especially those for street-cleaning violations, was significantly higher in neighborhoods with more Black residents, renters, and young adults (Brazil 2018).

A *Washington Post* analysis of the District of Columbia that looked at traffic tickets and parking tickets combined showed that the amounts of parking tickets issued in neighborhoods with more Black residents were nearly twice as high compared with neighborhoods with more White residents.¹³ It also found that 28 percent of the 2019 traffic and parking ticket amounts owed in predominantly Black neighborhoods stem from late penalties that accumulate over the original fines owed.¹⁴

In Chicago, Illinois, a *ProPublica* analysis found that eight of the ten ZIP codes with the highest aggregate outstanding ticket debt per adult were those with majority Black residents.¹⁵ They further note that driver's license suspensions and impounding of personal vehicles of those with unpaid parking tickets since 2011 has led to nation-leading spikes in Black households filing for personal bankruptcy (which temporarily allows them to regain their licenses and drive without fears of being apprehended).¹⁶

Studies in some other jurisdictions, including Durham, North Carolina, and Las Vegas, Nevada, both found that higher shares of parking citations were issued in areas with more households with lower incomes. Durham's Budget Department found that unpaid parking tickets, especially those with late fees, were mostly accruing in areas with more Black and Latine residents; they also conducted community assessments where Durham residents noted that parking tickets were among the most difficult fines and fees to pay.¹⁷ Whereas, in Las Vegas' residential blocks, which had about a third of total parking tickets (with the rest in downtown and other commercial areas), poorer ZIP codes and one particular lower-income housing complex shouldered a disproportionate share of parking tickets.¹⁸ Per some city officials, these disparities can be byproducts of variations in neighborhood infrastructure, such as lower availability of parking spaces and more abandoned vehicles and calls for services.¹⁹ However, continued enforcement of parking laws under such circumstances can exacerbate financial hardships while reinforcing racial disparities.

Furthermore, public trust in government can be undermined if parking restrictions and enforcement are seen primarily as a means to generate revenue as opposed to ensuring traffic flow and the safety of residents. A 2015 US Department of Justice investigation into Ferguson, Missouri, found serious evidence of aggressive ticketing and sentencing practices that had racially discriminatory and financially-perverse impacts. It also notes examples where city officials successfully asked prosecuting attorneys and court clerks to wipe away parking tickets acquired by their friends and colleagues (DOJ 2015). Altogether, the investigation concluded that the department's actions compromised public safety by focusing on revenues and violated federal laws by imposing disparate harms upon Ferguson's Black residents.

Analysis

Below we discuss our findings about parking tickets issued between January 2018 and December 2019 in Austin, Texas; Minneapolis, Minnesota; and Portland, Oregon. For a detailed explanation of why we chose these cities and our data collection and methods, see appendix B.

Where Are Parking Tickets Concentrated?

Across all three cities, parking tickets were densely concentrated in downtown areas (see figures 1–3). Downtown neighborhoods typically have a higher density of offices and other businesses, such as shops and restaurants; this typically means relatively fewer free parking spaces and more meters likely to be enforced. In Austin, the two census tracts in downtown with the most citations comprised 37 percent of total parking citations issued in the city. In Portland and Minneapolis, they comprised 25 and 21 percent, respectively. A prior analysis from Portland shows that commercial delivery companies like UPS or FedEx can comprise a large share of those ticketed in downtown areas.²⁰

Compared with the other two cities, Minneapolis' tickets were relatively less geographically concentrated. This was in part because of the city's parking tickets issued for snow emergency violations and winter season parking bans, which accounted for about 16 percent of all parking tickets issued between 2018 and 2019. In Minneapolis, meter-related tickets only accounted for 37 percent of the total, compared with 56 percent in Portland and 69 percent in Austin.

FIGURE 1
Tract Level Map of Total Parking Tickets Issued in Austin, TX, 2018–19

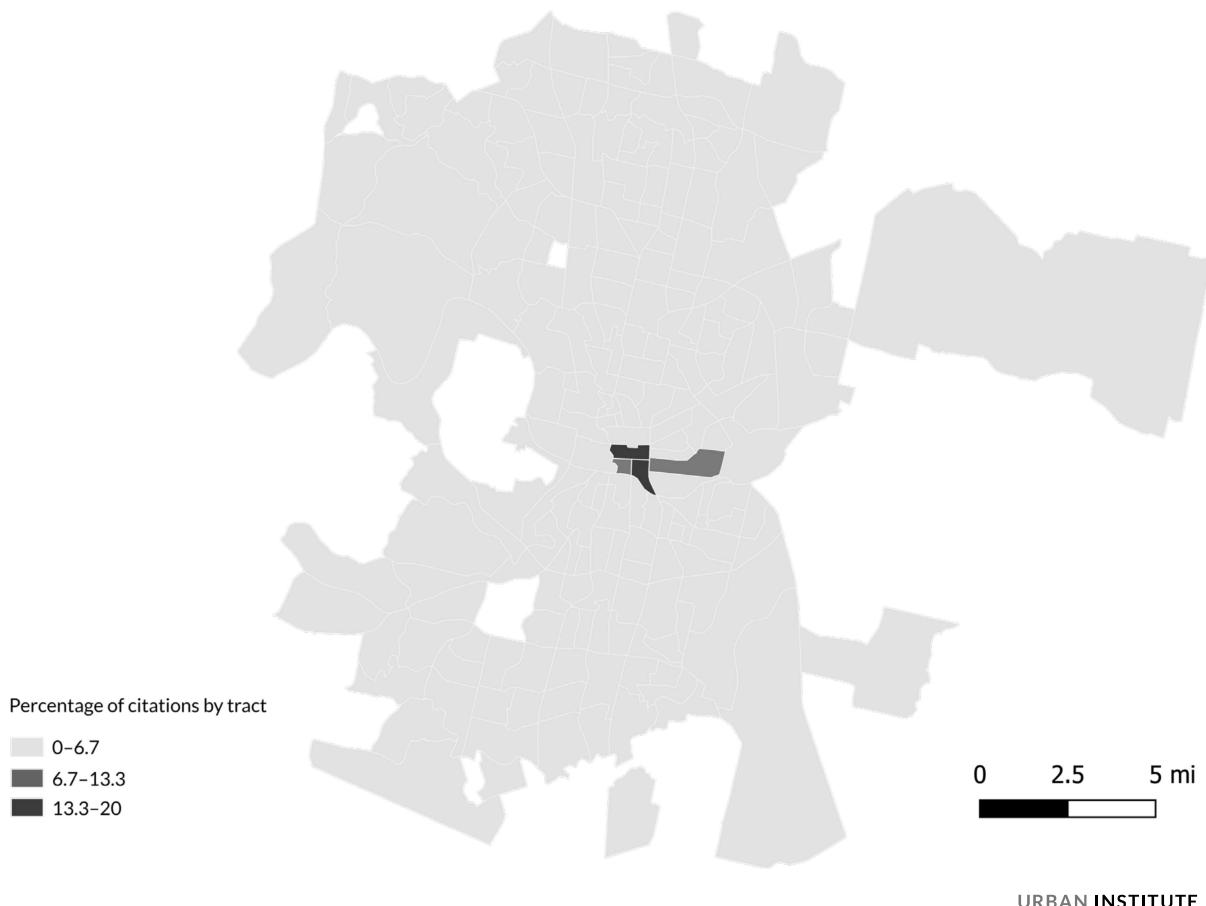


FIGURE 2
Tract Level Map of Total Parking Tickets Issued in Minneapolis, MN, 2018–19



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FIGURE 3
Tract Level Map of Total Parking Tickets Issued in Portland, OR, 2018–19



For maps showing the distribution of parking ticket dollar amounts by census tract, see appendix C.

How Do Ticket Counts, Amounts, and Type Vary by Place?

In terms of total tickets issued, Austin had the fewest among the three cities (250,850), whereas Portland had the most (468,308), with Minneapolis closely behind (429,325). After normalizing the number of tickets issued for the population sizes, we found Minneapolis issued over one ticket per city resident, whereas Austin issued just over one for every four city residents. In terms of the total amounts issued in parking tickets, Minneapolis and Portland each issued about \$37 million in parking tickets between 2018 and 2019, whereas Austin issued about \$9 million.

Austin is the only city that provided information on unpaid parking tickets. Just over \$2 million in outstanding payments existed as of September 2022, which comprised roughly 23 percent of total parking tickets issued between 2018 and 2019. As a share of the overall budget, this comprised only 0.2 percent of Austin's fiscal year 2018–19 general fund expenditures.²¹ Based on a review of statutory rules, for those with unpaid tickets, the consequences can include further additional penalties, such as fine increases by 30 percent and additional fees.²²

When ranking the three cities by number of tickets and amount of tickets normalized, we saw an inverse relation to land area. Austin, which had the least number of tickets, has the largest size at 320 square miles, whereas Portland has 133 square miles and Minneapolis has 54 square miles.²³ This may suggest parking tickets may be relatively easier to enforce in cities that have less sprawl, where greater competition for parking spaces and need for parking enforcement may exist. However, we could not find information on the number of parking officials per city and their level of activity in enforcing parking violations.

Ticketing rates across the seasons of the year were consistent for Austin and Portland, though they varied for Minneapolis, which saw higher issuance of parking tickets in the winter months. About 32 percent of tickets between 2018 and 2019 were issued in the winter months (January to March) in Minneapolis, while 20 percent were issued in the summer (July to September). In Austin and Portland, the highest ticketing rates occurred in the winter months as well, though at a lower rate than in Minneapolis, at 27 and 26 percent, respectively. The lowest ticketing rate for Portland was in the summer (24 percent), and for Austin it was in the spring (22 percent, April to June). Altogether, we largely did not see seasonality impact issuance of parking tickets.

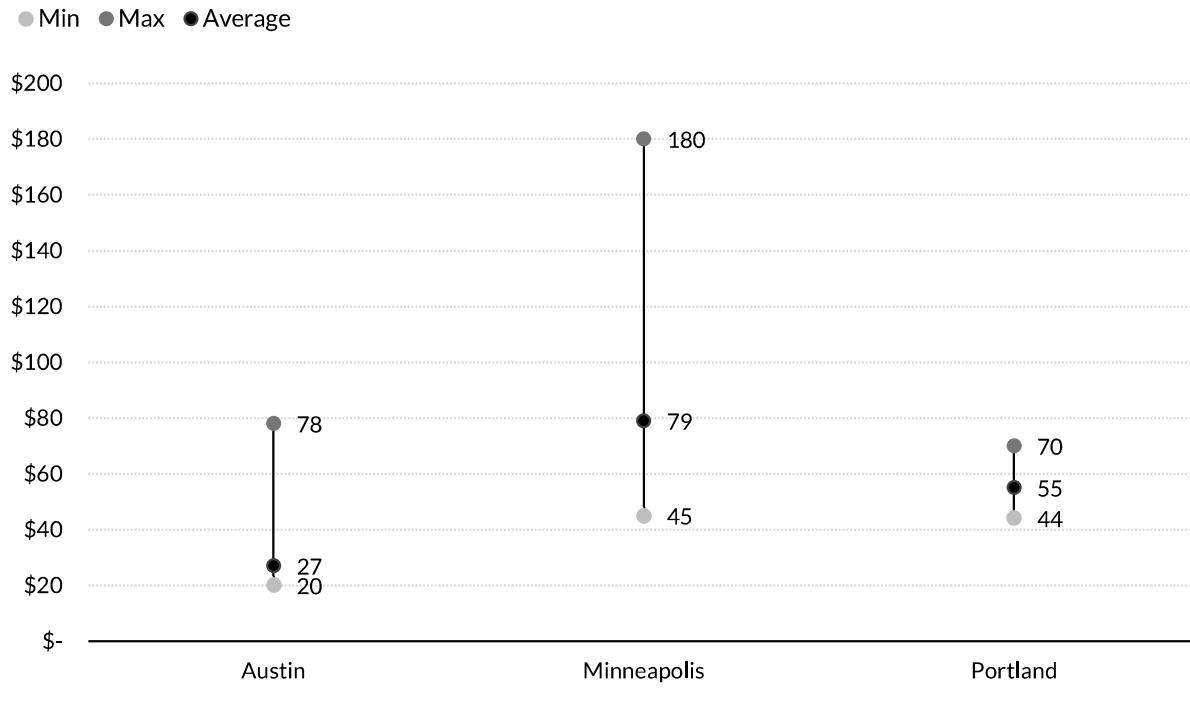
TABLE 1
Ticket Count and Ticket Amount Totals, 2018–19

City	Number of Tickets Issued	Number of Tickets per City Resident	Amount Cited	Amount Cited per City Resident
Austin	250,850	.26/person	\$8,702,976	\$9.02/person
Minneapolis	429,325	1.09/person	\$37,695,027	\$88.62/person
Portland	468,308	.73/person	\$36,686,162	\$57.21/person

Source: Authors' analysis of parking ticket data and American Community Survey, US Census Bureau.

Across all parking ticket types, the average amount for Austin was \$35, compared with \$53 in Portland, and \$80 in Minneapolis between 2018 and 2019. For meter-related tickets, in particular, ticket amounts ranged from \$20 to \$78 in Austin, \$44 to \$70 in Portland, and \$45 to \$180 in Minneapolis, for most meter-related ticket amounts (figure 4).²⁴ Whereas for violations for "failure to display vehicle registration," most ticket amounts ranged from \$108 to \$432 in Minneapolis to \$70 to \$145 in Portland.²⁵

FIGURE 4
Range of Meter-Related Ticket Amounts, 2018–19



Source: Authors' analysis of parking ticket data.

Note: For Minneapolis, \$180 is the 99th percentile value for meter-related tickets, not the maximum amount. The tickets included in the Minneapolis data have some extremely high values, up to tens of thousands of dollars, likely because of data discrepancies.

Examining the top 10 ticket types across cities, we saw that “no meter” or “overtime meter” violations account for a large portion, as was expected. But the other violations varied across cities. “Resident only” tickets, typically issued to people not permitted to park at a location because they do not reside there, were more common in Austin. “Failure to display vehicle registration” tickets were more common in Minneapolis and Portland. The aforementioned parking tickets for “snow emergency parking restrictions” and “winter season parking ban” were common in Minneapolis, comprising 16 percent of parking tickets issued between 2018 and 2019.

There were also variations in the level of descriptions and violation types across cities, including discrepancies in how a parking ticket is defined. In Austin and Portland, the parking tickets data had descriptions for violations less likely to overlap with one another, unlike in Minneapolis. “Wheres prohibit stopping, standing or parking,” “parked where temporary no parks,” and “parking in a no parking zone,” may all pertain to a similar violation but were recorded separately in the Minneapolis data. Despite the overlapping definitions, Minneapolis had the least number of unique parking violation types (65), compared with Austin (94) and Portland (95).

TABLE 1
Austin Top Ten Ticket Descriptions by Count, 2018–19

Ticket Description	Count	Percent (%)
Pay station receipt not displayed	121,437	53
Expired pay station receipt	24,963	11
Tow away zone	24,906	11
Resident only zone	16,173	7
Expired meter	10,305	5
Commercial service zone	9,469	4
Time zone	5,939	3
No parking area	5,378	2
Left wheel to curb	5,265	2
Within 15' of a fire hydrant	3,643	2

Source: Data obtained through a public records request to Austin Municipal Court.

TABLE 2
Minneapolis Top Ten Ticket Descriptions by Count, 2018–19

Ticket Description	Count	Percent (%)
Parked overtime in a meter zone	154,683	37
Vehicle registration required	73,122	17
Snow emergency parking restrictions	60,805	14
Parking in a no parking zone	48,169	11
Parked where temporary no parks	25,548	6
Wheres prohibit stopping, standing or parking	23,316	6
Parked within 5 feet of alley or driveway	14,384	3
General time limits for parking, in violation of sign erected	10,128	2
No parking, winter season parking ban	6,618	2
Parked within 30 feet of traffic control or school	5,986	1

Source: Data obtained through a public records request to Minneapolis Open City Portal.

TABLE 3
Portland Top Ten Ticket Descriptions by Count, 2018–19

Ticket Description	Count	Percent (%)
No meter receipt	107,685	29
Overtime meter	78,377	21
Failure to display current registration	68,563	18
Loading zone	28,950	8
No front or rear plate	23,224	6
No parking anytime	16,755	4
Overtime parking	15,424	4
Meter feeding	14,902	4
Improper display meter receipt	12,199	3
Upper northwest area parking permit required	10,349	3

Source: Data obtained through a public records request to Portland Public Records Request Center.

Do Demographic Disparities in Parking Enforcement Exist?

In overlaying geospatial parking ticket data with demographic data on race, ethnicity, median household income, housing tenure, and number of cars per household at the census tract level, we did not find significant correlation patterns. That is, unlike some prior studies in other cities, we did not find incidence of ticketing to be higher in areas with more Black residents (Brazil 2018). In part, this may reflect the need to look at ticketing patterns at a smaller geographic unit than census tract (census tracts generally have between 1,200 and 8,000 people), such as census blocks. In future research, we

hope to delve further into understanding the equity implications of where parking tickets are issued, and if possible, examine how parking enforcement can impact outstanding court debt.²⁶

What Other Data Do We Need to Analyze the Impact of Parking Tickets?

Altogether, our findings on the scale, type, and geographic dispersion of parking tickets across the three cities underscore the need for more and better data. For example, we cannot determine from the available information why over a fifth of parking tickets in Austin were unpaid, and how this may impact those least able to pay or least able to access other transportation options. Further information on the extent to which other cities have unpaid parking tickets would be beneficial in interpreting whether Austin's numbers are typical. Additionally, if more granular data were available for Minneapolis, for example, we would also have more insights on whether parking tickets issued outside of commercial areas, such as those issued for snow emergency parking restrictions, disproportionately burden families with lower incomes.

Conclusion

Parking tickets are one of the most common ways people interact with government and justice systems. In the three cities studied, authorities issued hundreds of thousands of parking tickets on a year-to-year basis; in Minneapolis, that amounted to over one ticket per resident, or \$89 in ticketed amount per resident, between 2018 and 2019. Parking ticket revenue may account for a small share of cities' revenues overall, but tickets issued can pose financial burdens on households. Total ticket amounts averaged \$35 to \$80, but this varied by type of violation, with those for failure to display vehicle registration costing over \$100. Furthermore, overdue parking tickets can balloon in value from surcharges and interest in most states and localities. In Austin, nearly one quarter of all parking tickets issued between 2018 and 2019 were unpaid as of September 2022.

Per our analysis, a large share of parking tickets were issued in downtown areas, where there tends to be more commercial activities and fewer residences. But more data are needed to fully understand who is impacted by parking tickets and how to better implement a system that does not put undue burden on residents while also ensuring that city services and infrastructure are not disrupted.

Accessing complete and detailed data on parking tickets can be challenging. Parking ticket assessment and payments vary from city to city and can often involve multiple city departments. The first step to conducting a robust equity analysis of parking tickets, and what their role is in broader fines and fees issues and criminal legal reforms, is for governments to work toward creating streamlined and transparent data systems for parking tickets.