UNIFORM ENFORCEMENT OR PERSONALIZED LAW? A PRELIMINARY EXAMINATION OF PARKING TICKET APPEALS IN CHICAGO

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This Article is one in a series of papers that sets the record straight about the type, quality, and quantity of information that U.S. cities may employ, so as to make more informed policy decisions. It does so, specifically, by examining information that is collected by the City of Chicago: in order to gauge the uniformity, as well as the relative cost effectiveness, of the parking ticket appeals process. The Article has six (VI) parts. Part I is the introduction, which sets the stage for a preliminary examination of the parking ticket appeals process in Chicago. Part II describes the applicable law. Part III explains this Article's methodological approach, which employs percentage analysis to explain how parking tickets are distributed, how parking ticket appeals are distributed, and how frequently ticket recipients obtain relief in Chicago. Part IV outlines the Article's findings and positive analysis, which includes the fact that more advantaged zip codes have higher administrative costs and lower error rates than disadvantaged zip codes. Part V contains its key normative recommendations. Part VI is the conclusion.

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I. INTRODUCTION

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Parking attendants,¹ often, prefer selective enforcement² to the hard work of uniformly applying the law.³ This preference for selective enforcement⁴ continues,

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1. By use of the term "parking attendant," this article makes reference to any individual that is given the authority to write a parking ticket. See Parking Enforcement Officer: Job Duties. *Requirements* and Outlook, STUDY.COM (2018).http://study.com/articles/Parking Enforcement Officer Job Duties Requirements and Out look.html [https://perma.cc/4U3C-7ZGH] ("A parking enforcement officer monitors roads and lots, ensuring drivers abide by local and state parking laws. They typically hand out citations and communicate with drivers."). Examples, at least in the case of Chicago, are police officers, parking enforcement aides, Chicago Transit Authority managers, and private contractors. For more on traffic-related sanctions, as opposed to only parking related ones, a good starting point may be James P. Economos' seminal "Traffic Court Procedure and Administration (Published by the American Bar Association, Standing Committee On the Traffic Court Program, American Bar Center 1961).

2. See, e.g., Hadar Aviram & Daniel L. Portman, *Inequitable Enforcement: Introducing the Concept of Equity into Constitutional Review of Law Enforcement*, 61 HASTINGS L.J. 413, 415 (2009) (implying that selective enforcement falls under their "working definition of 'inequitable enforcement" which is any "law enforcement activity which, despite satisfying constitutional review, violates notions of fairness, proportionality, and proper resource allocation.").

3. This preference, at least on the part of parking attendants that also serve in other public capacities, may arise from a series of federal decisions that discourage victims of public sector misconduct from bringing suit against negligent public employees. *See*, *e.g.*, George M. Dery III & Jacklyn R. Vasquez, *Why Should an "Innocent Citizen" Shoulder the Burden of an Officer's Mistake of Law?* Heien v. North Carolina *Tells Police to Detain First and Learn the Law Later*, 20 BERKELEY J. CRIM. L. 301, 302–03 (2015) ("Ignorance of the law is no excuse, unless you are a police officer. While motorists are expected to understand and comply with a 'multitude' of 'traffic and equipment regulations,' the Supreme Court in *Heien v. North Carolina*, ruled that an officer may properly seize a driver based on a 'mistaken understanding' of the law.").

4. E.g., Mara Shulman Ryan, *Criminal Law -- Invisible in the Courtroom Too: Modifying the Law of Selective Enforcement to Account for White Privilege*, 34 W. NEW ENG. L. REV. 301, 305 (2012) ("It is not unusual for police officers to perform their official duties in a discriminatory manner."). even if, uniform treatment is actually required.⁵ Illustrative examples of this preference are found in recent Illinois cases.⁶

After being issued twenty-four parking tickets by the Chicago Police Department ("CPD"), beginning in October 2007, Mark Geinosky filed suit in the Northern District of Illinois.⁷ In this case, *Geinosky v. City of Chicago*, the plaintiff asserted that his rights were violated by the defendant's issuance of clearly invalid parking tickets.⁸ The theory of this case was that the CPD ran afoul of 42 U.S.C. § 1983,⁹ in a variety of ways, by refusing to throw out these unlawfully issued tickets.¹⁰

The district court did not find that theory to be compelling, mostly because it did not accept that Geinosky had been singled out by parking attendants.¹¹ The Seventh Circuit Court of Appeals, however, proved to be a more sympathetic audience.¹²

6. *See, e.g.*, Geinosky v. City of Chicago, 675 F.3d 743 (7th Cir. 2012) (upholding in part, and reversing in part, the earlier decision).

7. *Id.* at 745; see also, Jon Yates, *Problem Solver: Ticketgate Ends in Settlement*, CHICAGO TRIBUNE, Dec. 20, 2012, http://articles.chicagotribune.com/2012-12-20/business/ct-biz-1220-problem-geinosky-20121220_1_mark-geinosky-class-of-one-discrimination-unlawful-civil-conspiracy [https://perma.cc/8L82-SJXX] ("[Beginning in October 2007, Geinosky] received two dozen tickets . . . For each ticket, he proved his car was not parked in the designated location at the time.").

8. *See* Yates, *supra* note 7 ("Geinosky claimed 'class-of-one' discrimination[,]... denial of substantive due process rights[,] and unlawful civil conspiracy.").

9. See 42 U.S.C. § 1983, Civil action for deprivation of rights (2012) ("Every person who, under color of any statute, ordinance, regulation, custom, or usage, of any State or Territory or the District of Columbia, subjects or causes to be subjected, any citizen of the United States or other person within the jurisdiction thereof to the deprivation of any rights, privileges or immunities secured by the Constitution and laws, shall be liable to the party injured in an action at law, suit in equity, or other proper proceeding for redress, except that in any action brought against a judicial officer for an act or omission taken in such officer's judicial capacity, injunctive relief shall not be granted unless a declaratory decree was violated or declaratory relief was unavailable.").

10. Yates, *supra* note 7 ("[Chicago's]Police Board . . . failed to explain why Geinosky had received the tickets.").

11. *Id.* ("In 2011, a district court judge dismissed the suit, saying Geinosky had failed to prove his claims.").

12. Id. ("[Through the issuance of] a sharply worded opinion . . . the 7th U.S. Circuit

^{5.} Compare CHICAGO, ILL., CODE § 9-64-220(b) (2017) ("Whenever any vehicle is parked in violation of any provision of the traffic code . . . any police officer, traffic control aide, other designated member of the police department, parking enforcement aide or other person designated by the Traffic Compliance Administrator observing such violation may issue a parking violation notice."), with Mark Konkol, Are Rogue Meter Maids Sticking It to Parkers One Bogus Ticket at a Time?, DNA INFO (July 21, 2015), https://www.dnainfo.com/chicago/20150721/south-loop/are-rogue-meter-maids-sticking-it-parkers-one-bogus-ticket-at-time [https://perma.cc/H4U3-2PX6] ("According to city [of Chicago] regulations, meter maids are trained to follow a very specific protocol before writing a ticket: Check the windshield for a valid parking receipt. Look for a motorist near the vehicle or parking payment station. Search the mobile meter system for the vehicle's license plate number to confirm payment. Double-check the license plate number. And before ticket-writers are allowed out [on] the street, they sign a document saying they'll abide by [all applicable laws and municipal] rules.").

Judge David F. Hamilton, who wrote on behalf of a three-judge panel, found that "a closer look at the . . . facts . . . reveals a disturbing pattern. Absent a reasonable explanation [by the CPD] . . . the pattern adds up to deliberate and unjustified official harassment [of Geinosky] that is actionable under the Equal Protection [clause]."¹³

About the same time that *Geinosky* was working its way through the federal courts, but prior to its settlement in December 2012,¹⁴ another excessive ticketing case was filed in the Circuit Court of Cook County.¹⁵ This Illinois state court case, *Fitzgerald v. City of Chicago*, elicited a similarly sympathetic response from the judiciary.¹⁶ After reading the pleadings, which stated that Jennifer M. Fitzgerald improperly "racked up . . . 678 parking tickets totaling more than \$106,000 while [her car remained] parked in the same spot [at O'Hare International Airport] for 2 ¹/₂ years," Judge Thomas Allen denied the City of Chicago's motion to dismiss with prejudice.¹⁷

One of the key reasons that Judge Allen would not grant the motion was that parking attendants had selectively enforced the law.¹⁸ For example, as the plaintiff correctly pointed out, the "municipal code states that cars parked at O'Hare for more than 30 days will be ticketed and towed immediately, meaning most of the tickets should never have been written."¹⁹ As a result, Judge Allen gave Fitzgerald a chance to refile instead of dismissing the case with prejudice.²⁰ An out-of-court settlement was reached by Chicago, Fitzgerald, and an unrelated third party so as to avoid trial.²¹

13. *Geinosky*, 675 F.3d at 745.

[https://perma.cc/7KSG-K9TP] (dismissing, at least in part, plaintiff's claim).

16. Mike Brockway, *City Offers to Drop Record \$105,000 Parking Fine to Just \$2,500*, DNA INFO (Apr. 10, 2013), https://www.dnainfo.com/chicago/20130410/ohare/city-offers-drop-record-100000-parking-fine-just-2500 ("[Jennifer M.] Fitzgerald, through pro bono attorney Robin Omahana, filed a lawsuit against the city [of Chicago] and [an unrelated third-party, Brandon] Preveau in November [2012].").

17. Mike Brockway, *City Settles \$100,000 Parking Ticket Case: 'It was a Nightmare,'* DNA INFO (Aug. 22, 2013), https://www.dnainfo.com/chicago/20130822/ohare/city-settles-100000-parking-ticket-case [https://perma.cc/R7QJ-Y22D] ("When Fitzgerald's lawsuit came before Cook County Circuit Judge Thomas Allen in April, he dismissed the case but allowed Omahana to file an amended complaint.").

18. *Id.* ("Omahana . . . argued, based on [the express language found in the] municipal code, that the city should have towed the car years earlier and that only a fraction of the tickets issued were written legitimately.").

19. Brockway, supra note 16.

20. *Id.* ("Allen ultimately dismissed the case, but gave Fitzgerald 28 days to amend her complaint and address the objections raised by the city and Preveau. He also encouraged all parties to try to work out a settlement.").

21. Brockway, *supra* note 17 ("The City of Chicago recently agreed to drop more than \$100,000 in parking ticket fines on a car registered in Fitzgerald's name that racked up a record 678 tickets.").

Court of Appeals reinstated the lawsuit, calling Geinosky's claims of harassment 'troubling.'").

^{14.} Yates, *supra* note 7 ("Geinosky said . . . that he has reached a settlement to end his federal lawsuit.")

^{15.} Complaint, Fitzgerald v. City of Chicago, No. 2012-CH-40263 (Ill. Cir. Ct. 2012), http://theexpiredmeter.com/wp-content/uploads/2012/11/fitzgerald.pdf

Geinosky and *Fitzgerald*, among other recent controversies,²² imply that parking attendants may not be uniformly enforcing the parking laws.²³ The city, however, rejects any such implication.²⁴ As a result, additional research is needed so as to determine how the law is applied in Chicago.

This research may have profound implications, especially if it asks and answers several open questions. For example, is irrelevant information being used to inform ticketing decisions in Chicago, such as the race, income, or home zip code of a driver? If erroneous decisions result from using irrelevant information, then how are these outcomes distributed by zip code? In the event that such outcomes are disproportionately imposed, then how to limit selective enforcement in Chicago?

My Article asks and answers all three questions specifically by focusing on an issue that was raised in *Geinosky* and *Fitzgerald*: what are the costs of permitting selective enforcement, which is an impermissibly "personalized" way of applying the law?²⁵ It does so, initially, by using percentage analysis to determine how parking tickets, parking ticket appeals, and successful parking ticket appeals are distributed

23. See, e.g., Kate L. Antonovics & Brian G. Knight, A New Look at Racial Profiling: Evidence from the Boston Police Department, 91 REV. ECON. & STAT. 163 (2009) (describing the fact that some police officers engage in racially-discriminatory enforcement whenever the race of the driver and race of the officer are not the same).

^{22.} See, e.g., Paul Kiel & Hannah Fresques, Data Analysis: Bankruptcy and Race in America, PROPUBLICA (Sep. 27, 2017), https://projects.propublica.org/graphics/bankruptcydata-analysis#Illinois [https://perma.cc/2VKH-HAXN] ("In a recent examination of bankruptcy filings in Cook County, Illinois . . . Edward Morrison and Antoine Uettwiller of Columbia Law School came to the conclusion that fines from state and local governments . . . were a primary driver of the racial disparities in the district. Black debtors often chose to file under Chapter 13 in order to prevent the seizure of a car or suspension of a driver's licenses . . . And since these debtors tended to have lower incomes, they failed to complete their Chapter 13 plans at higher rates."); Fran Spielman, City Worker Yanked Out of NW Side After Writing Thousands ofTickets, CHICAGO SUN-TIMES, Mar. 22, 2017. http://chicago.suntimes.com/chicago-politics/city-employee-yanked-out-of-nw-side-forwriting-too-many-tickets/ [https://perma.cc/P6PJ-GQX8] ("[Chicago Parking Enforcement Aide] Andrew J. Petersen infuriated local residents by bragging about his ticket totals in an almost taunting string of Facebook posts.").

^{24.} While parking ticket attendants do not use the same standard in issuing tickets, the City of Chicago confirms that these agents actually receive relatively-standard training. Compare Mike Brockway, Private Meter Readers Wrote Hundreds of Thousands of Tickets, Data Shows, DNA INFO (Mar. 31. 2015). https://www.dnainfo.com/chicago/20131231/downtown/private-meter-readers-wrotehundreds-of-thousands-of-tickets-data-shows [https://perma.cc/97DT-P2W9] ("[P]arking enforcement personnel . . . have to go through a mandatory training process to ensure they are writing tickets properly.") with Konkol, supra note 5 ("City parking enforcement supervisors check for patterns of 'errors' made by tracking voided tickets or fines caused by individual ticket-writers.").

^{25.} The fact that agents are given broad discretion does not mean that they may "personalize" the law by applying it in expressly unauthorized ways. *See Call for Papers: Symposium on Personalized Law*, UNIVERSITY OF CHICAGO LAW REVIEW (2018), http://lawreview.uchicago.edu/call-papers-symposium-personalized-law

[[]https://perma.cc/D55Z-WKLW] (defining personalized law as "legal rules tailored to specific individuals or circumstances.").

by zip code in Chicago.²⁶ The Article later tests a simple hypothesis: that disadvantaged zip codes may not be treated the same, in terms of how parking tickets are distributed, parking tickets are appealed and parking ticket appeals are granted, as the average Chicago zip code. It concludes with a finding about whether there is uniform treatment, at least in terms of how parking tickets are distributed and handled over time (i.e. 2012 to 2016), as determined by the use of a simplified measure of distributional fairness.²⁷

In carrying out this work, the Article draws on recent scholarship in local government law. It is informed, for example, by cutting-edge behavioral law and economics research,²⁸ which focuses on the distributive effects of specific public

Allocation refers to the relative division of the resource flow among alternative product uses – how much goes to the production of cars, to shoes, to plows, to teapots, etc. A good allocation is one that is efficient, i.e. that allocates resources among product end-uses in conformity with individual preferences as weighted by the ability of the individual to pay...

Distribution refers to the relative division of the resource flow, as embodied in final goods and services, among alternative people. A good distribution is one that is just and fair, or at least one in which the degree of inequality is limited within some acceptable range...

28. See, e.g., Zachary D. Liscow, Is Efficiency Biased? (Yale Law & Economics Research Paper, Paper No. 581, 2018), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3018796

^{26.} *Cf*. Randall K. Johnson, *Where Schools Close in Chicago*, 7 ALB. GOV'T. L. REV. 508, 510–11 n.20 (2014) ("This article . . . directly answers the question by using a compositionbased approach to establishing disproportionality [i.e. percentage analysis]. In doing so, it serves as a starting point for more rigorous empirical work . . . in keeping with the analysis from a popular statistics textbook, 'the null hypothesis [of future research will be] that the populations from which the samples are drawn are equal on the characteristics of interest . . . [if] the null hypothesis of "no difference" in the populations is true, then any means calculated from randomly selected samples should be roughly equal in value.' As a result, future research may go beyond the basic question to be answered in this article: 'are there [*any* significant] differences between the samples or categories of the independent variable?' Instead, it [will ask]: 'are the [observed] differences between the samples large enough to reject the null hypothesis and [to] justify the conclusion that the populations represented by the samples are different?''' (citing JOSEPH F. HEALY, STATISTICS: A TOOL FOR SOCIAL RESEARCH 239 (Lin Marshall et al. eds., 6th ed. 2002))).

^{27.} Distributional fairness, which assumes that justice depends upon the amount of inkind goods that a government provides to its citizens, is a valid way to determine whether similarly-situated people are treated in a uniform way. Another valid option, allocational fairness, assumes that justice depends upon the amount of money that a government spends in providing in-kind goods to its citizens. The key difference between these two approaches is their unit of analysis, as distributional fairness directly measures state action (i.e. state action is measured by what a specific government produces and turns over to citizens in terms of public goods and services) whereas allocational fairness indirectly measures state action (i.e. state action is measured by what a specific government spends to produce and turn over to citizens in terms of public goods and services). Cf. Herman E. Daly, Allocation, distribution, and scale: towards an economics that is efficient, just and sustainable, 6 ECOL. ECON. 185, 186 (1992):

policies such as municipal appeals processes. The Article also builds on interdisciplinary scholarship that investigates the relationship between permissive appeals processes and local budgetary issues.²⁹ A third influence is an emerging body of work, which examines the nature of the relationship between seemingly-neutral legal rules, which often govern local decision-making, and distributional fairness.³⁰

Within this context, the Article makes key contributions to all three lines of research. It does so, initially, by identifying how parking tickets are distributed across the 59 zip codes in Chicago. This Article, then, identifies the zip code location of every parking ticket recipient that filed an appeal over the last five years (2012 to 2016). Third, it identifies the zip code location of every parking ticket recipient that successfully appealed during the study period. The Article concludes by analyzing these data, including the computation of statistics such as win rate on appeal, so as to determine whether certain disadvantaged zip codes are treated any differently than the average Chicago zip code in terms of distributional fairness.³¹ The key question is whether parking ticket error rates, as measured by the use of win rates on appeal so as to gauge distributional fairness, are distributed uniformly during the study period.

This Article, in other words, assumes that disproportionate treatment may arise from the characteristics of people that live within specific zip codes. It also assumes that the most salient of these characteristics could be race, income, and location, as indicated by recent studies of how public goods and services are distributed across municipal space in Chicago.³² These assumptions lead to the testing of a simple

31. *Cf.* Randall K. Johnson, *How Tax Increment Financing (TIF) Districts Correlate with Taxable Properties*, 34 N. ILL. U. L. REV. 39, 41 n.19 (2013) ("This Article [makes its findings and reaches its conclusions] by using Microsoft Excel *See, e.g.*, OFFICE, http://office.microsoft.com/en-us/excel-help/correl-HP005209023.aspx.").

32. See, e.g., MARY PATTILLO, BLACK ON THE BLOCK: THE POLITICS OF RACE AND CLASS IN THE CITY 2 (2008) ("The story of the gentrification of North Kenwood–Oakland by middleand upper-income African Americans—assisted by municipal, institutional, philanthropic, and corporate actors-makes clear the existence of divergent class interests within the black community."); ROBERT J. SAMPSON, GREAT AMERICAN CITY: CHICAGO AND THE ENDURING NEIGHBORHOOD EFFECT 6 (2012) ("Spatially inscribed social differences, I argue, constitute a family of 'neighborhood effects' that are pervasive, strong, cross-cutting, and paradoxically stable even as they are changing in manifest form."); Stephanie Schmitz Bechteler, 100 Years and Counting: The Enduring Legacy of Racial Residential Segregation in Chicago in the Post-CHICAGO Civil Rights Era. THE URBAN LEAGUE 1. 3 (2016).https://www.thechicagourbanleague.org/cms/lib07/IL07000264/Centricity/Domain/1/CULtiv ate%20Part%201_Residential%20Segregation%20and%20Housing-

Transportation_Final%20Draft_3-1-16_10P.pdf [https://perma.cc/HS5U-4JPB] ("In this

[[]https://perma.cc/3TXS-WZBP] (explaining whether, or not, economically-efficient policies lead to discrimination).

^{29.} See Randall K. Johnson, *Who Wins Residential Property Tax Appeals?*, 6 COLUM. J. OF TAX L. 209 (2015) (applying percentage analysis to determine if more property tax appeals are filed, and won, by certain Cook County townships.).

^{30.} See, e.g., Zachary D. Liscow, Are Court Orders Sticky? Evidence on Distributional Impacts from School Finance Litigation 15 J. Empirical Legal Stud. 4 (2018), https://onlinelibrary.wiley.com/doi/abs/10.1111/jels.12172 (explaining whether, or not, economically-efficient legal rules lead to distributional fairness).

hypothesis that has to do with whether disadvantaged zip codes may be treated differently from more advantaged zip codes, at least with respect to the parking ticket appeals process.³³ This hypothesis aligns with recently-substantiated claims that Chicago often distributes some public goods/services in a discriminatory manner.³⁴

I have tested similar hypotheses in several recent articles;³⁵ since my past work also focused on if there were any differences in treatment rather than whether observed differences actually matter.³⁶ The basic idea, as applied in this study of

inaugural series, we will examine some of the current impacts of enduring racial residential segregation on the lives of African-Americans in Chicago.").

33. See, e.g., Mary Wisniewski, 'Biking while black': Chicago Minority Areas See the Most Bike Tickets, CHICAGO TRIBUNE, Mar. 17, 2017, http://www.chicagotribune.com/news/local/breaking/ct-chicago-bike-tickets-minorities-0319-20170317-story.html [https://perma.cc/3BQ6-78LN] ("As Chicago police ramp up their ticketing of bicyclists, more than twice as many citations are being written in African-American communities than in white or Latino areas, as Tribune review of police statistics has found.").

34. *See supra* note 25. Discrimination may be used offensively and defensively, so as to undercut the rights of socially-unpopular groups and to expand the rights of popular ones. See, e.g., John Byrne, City Workers Gave Out Free Street Parking to Friends During Blackhawks, Bulls Games, CBS CHICAGO (Jul. 17, 2017), http://www.chicagotribune.com/news/local/politics/ct-chicago-workers-street-parking-scammet-20170717-story.html [https://perma.cc/3LQD-8VHP] ("While many regular fans were shelling out big bucks to park near United Center, Chicago city workers . . . set aside free street parking for friends and family.").

35. My past work with simplified models has inspired follow-up research, which uses regression analysis to look at the residential property tax appeals process in the City of Chicago and Cook County as a whole. Compare Johnson, supra note 29 (applying percentage analysis to determine who wins residential property tax appeals in Cook County) with ROBERT ROSS, U. CHI. HARRIS PUB. POL'Y, THE IMPACT OF PROPERTY TAX APPEALS ON VERTICAL EQUITY IN COOK COUNTY, IL (2017), http://apps.chicagotribune.com/news/watchdog/cook-countyproperty-tax-divide/data/harris-study.pdf [https://perma.cc/U8W6-RH7Y] (applying regression analysis to determine who wins residential property tax appeals in Cook County). This follow-up work has garnered attention from local, state, national, and international publications and substantiated my preliminary research findings about residential property tax appeals in Cook County. See, e.g., Jason Grotto & Sandhya Kambhampati, The Tax Divide: Commercial Breakdown, CHICAGO TRIBUNE, Dec. 7, 2017. http://apps.chicagotribune.com/news/watchdog/cook-county-property-tax-divide/index.html [https://perma.cc/UL8M-FW2W] ("Owners of residential properties, as a group, also ended up paying more in property taxes than they would have if the assessor's office had done its work properly. The total amount of property taxes levied in a given year is fixed, so if one group of property owners doesn't pay its fair share, others have to make up the difference.").

36. See Randall K. Johnson, Do Police Learn From Lawsuit Data, 40 RUTGERS L. REC. 30 (2012–2013), http://lawrecord.com/files/40_Rutgers_L_Rec_30.pdf [https://perma.cc/2M6T-K85D] (applying a ratio-based approach to determine the nature of the relationship between lawsuit data collection and published §1983 cases); Randall K. Johnson, How the United States Postal Service (USPS) Could Encourage More Local Economic Development, 92 CHI. KENT L. REV. 593 (2017) (applying a simplified approach to reform, which is informed by economic analysis, to determine how the USPS could encourage more economic development on the ground); Randall K. Johnson, Medical Malpractice Claims in Mississippi: A Preliminary Analysis, 34 MISS. C. L. REV. 191 (2015) (applying an parking ticket appeals, is that residents of disadvantaged zip codes (i.e. majority-Black zip codes, lower-income zip codes, or South Side zip codes) may have a distinct appeals rate, a different successful appeals rate, and a distinct win rate on appeal than the average local zip code (i.e. the mean, or numeric-average, of all 59 zip codes) and that any observed difference could have implications for distributional fairness in Chicago. This Article acknowledges that there may be several plausible explanations for such a difference in treatment.³⁷ It nonetheless accepts that the most compelling explanation may be the most straightforward one: that public employees may allow implicit biases to inform their decisions, especially if they know that valid administrative complaints will fall on deaf ears.³⁸ If this explanation holds up, using percentage analysis, it may be assumed that the parking ticket appeals process may not be cost-justified: especially if measured in terms of the relationship between what is spent on detecting errors and the ticket error rates.³⁹

arithmetic-based approach to determine where medical malpractice claims are filed in Mississippi); Johnson, *supra* note 29 (applying percentage analysis to determine who wins residential property tax appeals in Cook County); Randall K. Johnson, Why U.S. States Need Pension Waiver Credits, 40 S. ILL. U. L. J. 203 (2016) (applying a simplified approach to reform, which is informed by economic analysis, to determine how to overcome the fresh consideration dilemma that prevents some states from dealing with their public pension issues); Randall K. Johnson, Why Police Learn from Third-Party Data, WAKE FOREST L. REV. (Supp. 2013), http://wakeforestlawreview.com/2013/01/why-police-learn-from-ONLINE third-party-data/ [https://perma.cc/S6TN-HZVS] (applying a ratio-based approach to determine the nature of the relationship between third-party data collection and published \$1983 cases); Johnson, *supra* note 26 (applying percentage analysis to determine if Chicago schools closed, disproportionately, in disadvantaged areas); Audrey G. McFarlane & Randall K. Johnson, Cities, Inclusion and Exactions, 102 IOWA L. REV. 2145 (2017) (applying a simplified approach to reform, which is informed by economic analysis to determine how much cities can ask of developers without running afoul of the Takings Clause); Randall K. Johnson, Why We Need a Comprehensive Recording Fraud Registry, N.Y.U. J. LEGIS. & PUB. POL'Y QUORUM 88 (2014) (applying a simplified approach to reform, which is informed by economic analysis, so to determine how to limit recording fraud).

37. See also Pam Zekman, Thousands of Parking Tickets Issued Incorrectly in Chicago, CBS CHICAGO (Jun. 21, 2016), http://chicago.cbslocal.com/2016/06/21/thousands-of-parking-tickets-issued-incorrectly-in-chicago/ [https://perma.cc/BE4D-ZFWZ] ("Nearly 3,300 parking tickets have been dismissed in the city over the last two years because they were incorrectly issued . . . [this incorrect imposition of a sanction applied to all] drivers who used the Park Chicago app [smartphone application] incorrectly."). Other plausible explanations, which fall outside the scope of this paper, are the effect of other omitted variables such as relative rate of vehicle maintenance (i.e. whether the ability to conduct regular maintenance on a vehicle, which prevents breakdowns, helps to account for any observed differences in treatment).

38. *See, e.g.*, Shane Shifflett, Alissa Scheller, Scilla Alecci & Nicky Forster, *Police Abuse Complaints by Black Chicagoans Dismissed Nearly 99 Percent of the Time*, THE HUFFINGTON POST (Dec. 7, 2015), http://data.huffingtonpost.com/2015/12/chicago-officer-misconduct-allegations [https://perma.cc/8M3X-MD3V] ("Of 10,500 complaints filed by black people between 2011 and 2015, just 166—or 1.6 percent—were sustained or led to discipline after an internal investigation. Nationally, between 6 and 20 percent of [all] citizen-initiated complaints are sustained.").

39. As such, it could be assumed that the parking ticket appeals process is a good example

This Article, in other words, assumes that if disadvantaged zip codes in Chicago have a different appeals rate (i.e. perceived error rate), a distinct successful appeals rate (i.e. actual error rate), or a different win rate on appeal (i.e. frequency that actual errors lead to dismissal of a parking ticket) than the average Chicago zip code, then its null hypothesis will be rejected (i.e. disadvantaged zip codes are not treated the same as other zips). Conversely, in the event that disadvantaged zip codes have the expected appeals rate (i.e. perceived error rate), the expected successful appeals rate (i.e. actual error rate), and the expected win rate on appeal (i.e. frequency that actual errors lead to dismissal of a parking ticket), then the null will not be rejected (i.e. disadvantaged zip codes are treated the same). Based on what is ultimately found by using percentage analysis, this Article may decide if there is uniform enforcement (i.e. Chicago does not discriminate with respect to how it distributes ticket or handles appeals) or more personalized application of the law (i.e. Chicago may discriminate in distributing tickets or handling appeals).

One potential downside to using percentage analysis, at least as a valid test of distributional fairness, is that its findings could be affected by the fact that zip codes contain different numbers of people. This "size" issue, which may be referred to as a relative magnitude problem, is usually addressed by taking into account the possibility that having different numbers of people in a zip code may impact the distribution of tickets, appeals, and successful appeals. The Article deals with this issue by putting all fifty-nine Chicago zip codes on the same numeric scale by using percentage analysis to create standard units such as appeals rate, successful appeals rate, and win rate on appeal. The basic idea is that the appeals rate and successful appeals rate may be used to determine how much is spent in carrying out the parking ticket appeals process, whereas win rate on appeal helps to establish whether such costs are justified in light of the error rate at the individual, group and population levels. Such an approach may indicate that a seemingly-neutral process leads to an unjustified redistribution of public resources from one group of zip codes to another.

Although this Article does not try to establish if any observed differences are statistically-significant, which is a valid way of determining how much confidence may be placed in a given research finding, it could serve as a point of departure for future work that does so using regression. Such work may go beyond the limited scope of my current Article, which focuses on whether there are any observable differences in terms of how disadvantaged zip codes and other Chicago zip codes are treated in the parking ticket appeals process. By doing so, hopefully using more reliable methods, future work may answer related questions such as "does Chicago enforce valid and final parking tickets in a uniform way?"

This future work, much like the current Article, could identify public sector misconduct at a modest cost. Each may do so for three primary reasons. First, such scholarship operates as an early-warning system by putting U.S. governments on notice about questionable policies and practices. It also is easy for laypersons to use and understand, at least in comparison to more complex approaches such as regression. Lastly, each may encourage follow-up research, especially when authors fully describe their methodologies and provide immediate access to existing datasets.

of a neutral legal process that has hidden inefficiencies and inequitable outcomes.

As such, this Article is understood to be only one in a series of papers that could set the record straight about the type, quality, and quantity of information that U.S. governments may use to make more informed policy decisions. It does so by examining the parking ticket appeals process in Chicago: so as to gauge the uniformity, and the relative cost-effectiveness, of the parking ticket appeals process. The Article proceeds in five additional parts. Part II describes the applicable law. Part III explains this Article's methodological approach, which employs percentage analysis to explain how parking tickets are distributed, how parking ticket appeals are distributed, and how frequently ticket recipients obtain relief in Chicago. Part IV outlines the Article's preliminary findings and positive analysis, which includes the fact that more advantaged zip codes have higher administrative costs and lower parking ticket error rates than disadvantaged zip codes. Part V contains its key normative recommendations. Part VI is the conclusion.

II. ISSUE PRESENTED

Budgetary issues have plagued the City of Chicago for a number of years.⁴⁰ These problems arose from excessive spending, inaccurate financial estimates, and modest local government revenues.⁴¹ The city's issues, later, were made even worse by the recent worldwide recession.⁴²

The Great Recession, which began in 2007 and caused a significant reduction in local government revenues in the United States, forced Chicago to change its budgetary priorities.⁴³ For example, the city has significantly reduced its spending by implementing cost controls.⁴⁴ It also has improved its financial forecasting through the use of more realistic economic assumptions.⁴⁵ Lastly, Chicago has sought to increase its own sources revenues by collecting more of its debts.⁴⁶

40. *How Chicago Debt Exploded*, CHICAGO TRIBUNE, Nov. 17, 2013, http://articles.chicagotribune.com/2013-11-17/news/ct-edit-chicago-taxpayers-edit-1117-20131117_1_pension-money-chicago-debt-police-and-fire-funds [https://perma.cc/G3YB-QGDP] ("Decades of abuse and neglect by its political class leave Chicago with insufficient funds for necessities, let alone for smart extras.").

41. *Id.* ("The most devastating sin in Chicago was arrogance—mayors and aldermen sure they could see the city's economic future and, paradoxically, doubting that it ever could implode.").

42. *Id.* ("[The damage caused by the Great Recession] is deep and prolonged because [Chicago] City Hall had spent, borrowed and promised so much that it couldn't tolerate any revenue dips.").

43. See, e.g., Fran Spielman, Emanuel's 2017 Budget Address: "Chicago is Back on Solid Ground," CHICAGO SUN-TIMES, Oct. 11, 2016, http://chicago.suntimes.com/news/emanuels-2017-budget-address-chicago-is-back-on-solid-ground/ [https://perma.cc/KA2G-M2QL] ("Chicago has regained its financial footing because city officials made some tough decisions,' Mayor Rahm Emanuel said Tuesday in his 2017 budget address.").

44. *Id.* ("The mayor's budget assumes \$148 million in revenue growth, driven by increases in sales, personal property lease tax and city sticker fees.").

45. *Id.* ("Under the category titled 'improved fiscal management,' Emanuel anticipates generating \$86.4 million by 'sweeping aging revenue accounts, TIF reform' and through investment reforms.").

46. Id. ("The Chicago Sun-Times reported last week that Emanuel plans \$30 million in

One example of an outstanding debt, which has traditionally gone undercollected, is the local parking ticket.⁴⁷ These \$25 to \$250 fines, often, are imposed for certain non-driving related violations.⁴⁸ These fines, under the applicable law, are considered to be entirely civil in nature.

Fully collecting parking ticket fines may be an effective way to improve Chicago's long-term budgetary outlook,⁴⁹ especially as it is a politically-viable alternative to tax increases or spending cuts.⁵⁰ This approach also may have lower opportunity costs, which are defined as the "amount of other goods and services [that] . . . could have been obtained instead [of the selected option],"⁵¹ at least in comparison with unrealistic attempts to improve public sector efficiency.⁵² Lastly, it

[https://perma.cc/83VA-NLUS].

48. CITY OF CHICAGO, Parking, Compliance, and Automated Enforcement Violations (2018),

https://www.cityofchicago.org/city/en/depts/fin/supp_info/revenue/tips_for_avoidingparking tickets.html [https://perma.cc/CQ3H-GM3D] ("There are other restrictions, not necessarily indicated by signs, that motorists are required to know. These violations include parking in a manner that impacts pedestrian safety, access for persons with disabilities, and traffic flow . .

. Violation Descriptions: Park or Stand on Sidewalk [,] Park or Stand on Parkway [,] Park or Stand on Crosswalk [,] . . . Improper Display of City Sticker [,] . . . Parking a Vehicle 6 Feet or Higher Within 20 Feet of a Crosswalk [,] . . . Parking a Vehicle for the Sole Purpose of Displaying the Vehicle for Sale [,] Parking a Vehicle to Make Repairs [,] Parking a Vehicle To Sell Merchandise [,] . . . Parking In An Alley [,] . . . Wrong Direction or 12 Inches from the Curb [,] . . . Parking Outside Diagonal Markings [,] . . . Snow Route: 2 Inches of Snow or More [,] . . . Non-Compliant License Plates [,] . . . Parking Prohibited In a Viaduct or Underpass.").

49. See Mary Wisniewski, You Can Leave Chicago, but Parking Tickets Are Forever, CHICAGO TRIBUNE, Jan. 23, 2017, http://www.chicagotribune.com/news/columnists/ctparking-tickets-getting-around-20170123-column.html [https://perma.cc/G9CS-KS67] ("The city needs money, and there is the legal maxim of *Nullum tempus occurrit regi*, which means 'No time runs against the king.' [This maxim explains why there] is no Illinois statute of limitations for murder, arson or parking tickets.").

50. See, e.g., Iris J. Lav & Dylan Grundman, A Balanced Approach to Closing State Deficits, CTR. ON BUDGET & POL'Y PRIORITIES (Feb. 25, 2011), https://www.cbpp.org/sites/default/files/atoms/files/2-16-10sfp.pdf [https://perma.cc/8E7V-T8WH] (describing how increased efficiency is one of the few "options available . . . outside of the . . . 'either-or' framework of tax increases and spending cuts.").

51. *Opportunity Cost*, A DICTIONARY OF ECONOMICS (4th ed. 2012).

52. See Spielman, supra note 43 ("For too long Chicago was not honest with taxpayers . . . about the true cost of [public goods and services] and we allowed dishonesty to turn into a

^{&#}x27;targeted' taxes, fines, and fees, even as it closes 'loopholes' and holds the line on property, sales, and gasoline taxes.").

^{47.} According to a number of different sources, the first U.S. parking ticket was awarded to the Reverend C.H. North of Oklahoma City, Oklahoma in 1935. *E.g., The First Parking Ticket Issued in 1935,* THE EXPIRED METER (Aug. 6, 2009), http://theexpiredmeter.com/2009/08/first-parking-ticket-issued-in-1935/

https://www.cityofchicago.org/city/en/depts/fin/supp_info/revenue/general_parking_ticketinf ormation/violations.html [https://perma.cc/8TL3-S5J7] (describing the sanctions that may be imposed, which range from \$25 to \$250); CITY OF CHICAGO, *Tips for Avoiding Parking Tickets* (2018),

may lead to more compliance if similarly-situated drivers are treated in a standard way with respect to the distribution of tickets, appeals and who wins on appeal.⁵³

Currently, it is unclear if similarly-situated drivers are treated in a completely uniform way with respect to how parking tickets are distributed, appealed, resolved, and collected upon in Chicago.⁵⁴ For example, out of the billions of dollars in revenues that could have been generated through parking ticket fines, untold amounts have gone uncollected.⁵⁵ This under-collection has gone on for a long time, although the scale of lost revenues has increased in recent years.⁵⁶ Over \$1.5 billion is estimated to have been left on the table, which represents a fifteen percent increase since 2011.⁵⁷

Another type of government failure may arise from the city's use of a "liberal" appeals process,⁵⁸ which permits every parking ticket recipient to challenge their fine, even when there is a clear violation of the applicable law.⁵⁹ This process, which guarantees ticket recipients a right to an administrative hearing, was authorized under

54. See generally Mike Brockway, \$1.5 Billion in Unpaid Tickets Could Be Huge Cash Cow for Chicago, DNA INF (Mar. 31, 2015), https://www.dnainfo.com/chicago/20150331/downtown/15-billion-unpaid-tickets-could-behuge-cash-cow-for-chicago [https://perma.cc/99HQ-J6XN] (describing how increased collections could benefit Chicago).

55. *Id.* ("[Parking ticket] debt accrues at a pace of \$1 million a week . . . far more than what the city collects.").

56. Id. ("Chicago ... collects [on "old" parking ticket] debt that dates to 1990.").

57. *Id.* ("The amount of unpaid tickets and fines has grown to . . . \$1.5 billion . . . The bulk of the debt, \$1.3 billion, is unpaid parking tickets, a total that has increased by \$177 million, or 15 percent.").

58. See CLIFFORD WINSTON, BROOKINGS INST., GOVERNMENT FAILURE VS. MARKET FAILURE: MICROECONOMICS POLICY RESEARCH AND GOVERNMENT PERFORMANCE 2–3 (2006), https://www.brookings.edu/wp-content/uploads/2016/06/20061003.pdf

[https://perma.cc/5BGZ-Y5N9] ("Government failure [which is a type of a market failure] . . . arises when government has created inefficiencies because it should not have intervened in the first place or when it could have solved a given problem or set of problems more efficiently, that is, by generating greater net benefits.").

59. See James M. Reilly, Joseph D. Condo & Matthew W. Beaudet, *The Department of Administrative Hearings for the City of Chicago: A New Method of Municipal Code Enforcement*, J NAT'L. ASS'N. ADMIN. L. JUDGES 89, 104 (1998) ("Under [this process,] . . . parties must be afforded certain due process considerations, i.e., adequate notice; and an opportunity to be heard, present evidence and witnesses, and be represented by counsel.").

real financial burden."").

^{53.} See Tom R. Tyler & Jonathan Jackson, Popular Legitimacy and the Exercise of Legal Authority: Motivating Compliance, Cooperation and Engagement (Yale L. Sch. Pub. L Working Paper, No. 306, 2014), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2292517 [https://perma.cc/X7YB-ANH2] ("The primary factor shaping decision acceptance . . . is the procedural justice of the process through which a decision was reached.").

65 ILCS § 5/1-2.1 and Chicago Municipal Code § 2-14-010.⁶⁰ It was created in the wake of a federal decision, *Van Harken v. City of Chicago*.⁶¹

Under the regulations that govern the parking ticket appeals process, which require that a timely hearing request is filed with the Vehicle Hearings Division,⁶² there is "a week-long period [each month] during which [parking ticket recipients] can come in for a hearing."⁶³ This monthly docket of cases, which was first used on January 1, 1997,⁶⁴ permits the Department of Administrative Hearings to resolve over 200,000 parking ticket appeals each year, which makes up more than half of the administrative hearings that are undertaken every year.⁶⁵

In each administrative hearing, Chicago has the burden of proof and production with respect to establishing the validity of each parking ticket.⁶⁶ Once this burden is met, using a preponderance of the evidence standard,⁶⁷ a parking ticket recipient "shall be asked to enter a plea of 'admit/liable' or 'deny/not liable,' and may then provide evidence to rebut the [parking ticket]."⁶⁸ Each ticket recipient, then, must produce legally-sufficient evidence in support of their position.⁶⁹ Once a ticket recipient has done so, then closing arguments may be made by each of the parties.⁷⁰

61. 906 F. Supp. 1182 (N.D. Ill. 1995), *aff'd as modified*, 103 F.3d 1346 (7th Cir. 1997), *cert. denied*, 520 U.S. 1241 (1997) (holding that parking violations are civil in nature and, therefore, the Due Process Clause is not the standard way to protect a defendant's rights in an administrative hearing). While scholars and practitioners may not agree on how much process should be given, it can be agreed that the current process may encourage both excessive ticketing (by parking attendants) and unjustified appeals (by ticket recipients).

62. CITY OF CHICAGO, *Contesting Tickets In-Person (Parking, Red Light and Automated Speed* Enforcement) (2018), www.cityofchicago.org/city/en/depts/fin/supp_info/revenue/challenging_tickets/contesting_i n_person.html [https://perma.cc/6B9M-8ZH8] ("You have seven (7) days from the date of issuance . . . to contest the ticket. If neither a contest [nor a] payment is received, a second Notice of Violation is mailed allowing twenty-one (21) days to request a hearing.").

63. Reilly, supra note 59, at 99.

64. *Id.* at 89 ("On January 1, 1997, Chicago's Department of Administrative Hearings began operations.").

65. *Id*. at 99.

66. *Id.* at 106 ("The city bears the initial burden of proof in the case, and the standard is by a preponderance of the evidence.").

67. *Id*.

68. Id.

69. See generally Charles S. Beach II, *The Chicago Traffic Court: Procedures and Practices* 8-1 in DEFENDING DUI AND RELATED CASES, VOLUME II, General Editors: Ernest R. Blomquist III and Thomas M. Moran, ILLINOIS INSTITUTE FOR CONTINUING LEGAL EDUCATION (2014) (describing how to introduce evidence into the record).

70. Reilly, *supra* note 59, at 106 ("Each party may be afforded the opportunity to make a closing argument.").

^{60.} *Id.* at 94, 96. ("Following the report of the Mayor's Commission in June 1996, the city embarked on an ultimately successful quest for the passage of a state law authorizing municipalities to put in place a centralized process of administrative hearings. The law (65 Illinois Compiled Statutes §5/1-2.1) gives Illinois home rule cities the ability to set up a single administrative hearing department to enforce those municipal ordinances that contain civil sanctions, and it provides for code hearing units, or divisions that hear certain parts of the municipal code.").

A parking ticket recipient, often, produces documentary evidence in an attempt to raise a valid defense or privilege.⁷¹ There are only a few valid excuses, however, which include: the ticket recipient is not the proper party, there are extenuating circumstances, the law is vague or ambiguous, there was a mistake on the part of the parking attendant, or a ticket recipient had addressed the issue before a ticket is issued.⁷² Excuses must be raised in a timely manner.⁷³

Upon completion of each hearing, which may be adjudicated in-person or by mail,⁷⁴ the ticket recipient is notified of a final decision.⁷⁵ Each final decision, which must be submitted in writing by an administrative law officer and made available to each of the parties, may be appealed as of right.⁷⁶ A timely appeal must be filed, in the proper place, within thirty-five days of a final decision.⁷⁷

Traditionally, scholarly examinations of the current appeals process asks whether parking tickets have any effect on driver behavior.⁷⁸ Other academic research tests the relationship between parking tickets and public finance.⁷⁹ A third line of work focuses on how ticket enforcement may be impacted by prevailing social norms.⁸⁰ A final category of investigation asks whether the current process encourages misconduct, especially if parking attendants do not fear being caught.⁸¹

74. Reilly, *supra* note 59, at 107 ("Due to the volume in the Vehicle Hearings Division, a respondent may elect to contest an alleged violation by mail rather than at an administrative hearing.").

75. Id.

76. CITY OF CHICAGO, *supra* note 62 ("If [a parking ticket recipient is] dissatisfied with the Administrative Law Officer's decision, [she] can appeal . . . under Administrative Review in the Circuit Court of Cook County.").

77. Id. ("This option must be exercised within 35 days of the Administrative Law Officer's decision.").

78. See, e.g., Dara Lee Luca, *Do Traffic Tickets Reduce Motor Vehicle Accidents? Evidence from a Natural Experiment*, 34 J. POL'Y. ANALYSIS & MGMT. 86, 86 (2014) ("This paper exploits exogenous variation in the number of tickets issued to identify the causal impact of traffic tickets in motor vehicle accidents using . . . data from Massachusetts.").

79. See, e.g., Thomas A. Garrett & Gary A. Wagner, *Red Ink in the Rearview Mirror:* Local Fiscal Conditions and the Issuance of Traffic Tickets, 52 J. L. & ECON. 71, 72 (2009) ("[W]e utilize county-level data from North Carolina . . . to test . . . if changes in the issuance of traffic tickets are influenced by changes in local government fiscal health.").

80. See, e.g., Raymond Fisman & Edward Miguel, *Corruption, Norms, and Legal Enforcement: Evidence from Diplomatic Parking Tickets*, 115 J. POL. ECON. 1020 (2007) (explaining how diplomats are not required to pay tickets).

81. See, e.g., Illya Lichtenberg, Police Discretion and Traffic Enforcement: A

^{71.} Id.

^{72.} CITY OF CHICAGO, *supra* note 62 ("The following defenses are allowed for most . . . tickets: 1. The respondent was not the owner or lessee of the cited vehicle at the time of the violation; 2. The cited vehicle or its state registration plates (license plates) were stolen at the time of the violation; 3. The relevant signs prohibiting or restricting parking were missing or obscured; 4. The relevant parking meter was inoperable or malfunctioned through no fault of the respondent; 5. The facts alleged in the parking . . . violation notice are inconsistent or do not support a finding that the specified regulation was violated . . . ; 6. The illegal vehicle condition did not exist at the time of the compliance violation; 7. The compliance violation has been corrected prior to adjudication.").

^{73.} Id.

This scholarship, however, does not answer a basic research question: who wins parking ticket appeals in Chicago? This question is important because it explains how parking tickets and appeals are distributed across the city and the treatment that is experienced by different zip codes. Furthermore, it also could gauge the uniformity and the relative cost-effectiveness of the parking ticket appeals process in Chicago. Thus, the mere act of answering this question may help to explain whether there is uniform treatment or some personalization of the municipal parking laws over time.

III. METHODOLOGY

This Article introduces a new City of Chicago dataset, which counsels for increased scrutiny of the parking ticket appeals process. It does so, initially, by collecting and combining parking ticket data that has been recently released by the Department of Administrative Hearings and the Department of Finance.⁸² These combined data, then, are used to compute several useful statistics: parking ticket appeals by zip code, successful appeals by zip code, and win rate on appeal by zip code.⁸³ Lastly, the Article contextualizes each statistic, so as to determine if some zip codes are treated different than predicted by the null hypothesis (i.e. the group-level average differs from the population average in terms of how parking tickets are appealed [appeals rate and successful appeals rate] and resolved [win rate on appeal]).

A single methodological approach is used to determine if there are any observable differences, as between specific groups of zip codes and the average Chicago zip code, which is referred to in this paper as "percentage analysis."⁸⁴ This approach "consists of reducing a series of related amounts to a series of percentages of a given base."⁸⁵ Depending upon the characteristics of these related amounts, the unit of analysis may be a percentage⁸⁶ or a rate.⁸⁷ In this Article, the primary units of analysis are rates (i.e. appeals rate, successful appeals rate, and win rate on appeal).

Government of Men, 50 CLEV. ST. L. REV. 425, 427 (2002) ("This Article addresses the apparent gap in the legal and social science literature concerning the unequal enforcement of traffic laws. How extensive do the police abuse the discretionary powers they are afforded?").

^{82.} See City of Chicago, Department of Administrative Hearings, RESPONSE TO FREEDOM OF INFORMATION ACT REQUEST (Dec. 19, 2016) ("This is a response to your FOIA request received by the Department of Administrative Hearings on December 5th."); See City of Chicago, Department of Finance, RESPONSE TO FREEDOM OF INFORMATION ACT REQUEST (Sept. 14, 2017) ("On behalf of the Department of Finance, I am responding to your Freedom of Information Act ('FOIA') request.").

^{83.} See infra Appendix at Tables D, E, and F.

^{84.} Cf. Johnson, supra note 29; Johnson, supra note 26.

^{85.} *Basic Financial Statement Analysis*, WILEY.COM (2014), http://www.wiley.com/college/kieso/0471363049/dt/analysttool/faprimer/fap11.htm [https://perma.cc/62PM-P5LX].

^{86.} See Joseph F. Healey, STATISTICS: A TOOL FOR SOCIAL RESEARCH 508 (6th ed., 2002) ("[A percentage is] . . . the number of cases in a category divided by the number of cases in all categories, the entire quantity multiplied by 100.").

^{87.} *Id.* ("[A rate is] . . . the number of actual occurrences divided by the number of possible occurrences per some unit of time.").

This Article defines "appeals rate" as the perceived error rate, at least from the perspective of people that received parking tickets during the study period. Similarly, "successful appeals rate" is defined as the actual error rate, as decided by the Department of Administrative Hearings. "Win rate on appeal," lastly, is a function of the first two concepts since it refers to the frequency that a parking ticket was issued in error and the ticket recipient was entitled to have their sanction overturned.

These rates are computed, initially, at the population level (i.e. all fifty-nine zip codes in Chicago).⁸⁸ Next, each is computed at the group level (i.e. the sixteen zip codes with majority-black residents and the forty-three zip codes with majority nonblack residents; the twenty-eight zip codes that are located in lower-income areas and the thirty-one zip codes that are located in higher-income areas; as well as the twenty-five zip codes that are located on the South Side and the thirty-four zip codes that are located on the North Side).⁸⁹ The final computation is at the individual level (i.e. the zip code location of ticket recipients).⁹⁰ All computations are done, using Microsoft Excel, and included in the Appendix.

Percentage analysis is used for at least three reasons. First, the approach is "helpful in evaluating the relative size of items or the relative change in items."⁹¹ Percentage analysis also provides "a useful way of comparing fractions with different denominators."⁹² Lastly, the approach could lay "a solid foundation for discussing . . . more complicated . . . [empirical] issues."⁹³

This approach, however, will not be useful if the article does not account for a range of potential issues.⁹⁴ Several issues are dealt with deliberately. Selection effects, which are defined as a type of "statistical bias in which there is an error in choosing the individuals or groups to take part in a scientific study," are accounted for by testing every zip code in Chicago.⁹⁵ Omitted variables, which are defined as an issue that "occurs when [variables that are not included in the study] . . . affect the relationship between the dependent variable and included explanatory variables," are dealt with by testing all fifty-nine Chicago zip codes at the population, group, and individual levels.⁹⁶ Other issues were completely avoided, such as relative magnitude

^{88.} See infra Appendix at Tables D, E, and F.

^{89.} Id.

^{90.} Id.

^{91.} Basic Financial Statement Analysis, supra note 85.

^{92.} PETER BROWN, MICHAEL EVANS, DAVID HUNT, JANINE MCINTOSH, BILL PENDER, & JACQUI RAMAGGE, INT'L. CTR. EXCELLENCE IN MATHEMATICS, PERCENTAGES: A GUIDE FOR TEACHERS 4 (2011).

^{93.} Jessica Polito, *The Language of Comparisons: Communicating about Percentages*, 7 NUMERACY 14 (2014), http://scholarcommons.usf.edu/numeracy/vol7/iss1/art6 [https://perma.cc/TT3T-Y6XY].

^{94.} See, e.g., John Antonakis, Samuel Bendahan, Philippe Jacquart & Rafael Lalive, On Making Causal Claims: A Review and Recommendations, 21 LEADERSHIP Q. 1086 (2010) (describing the various methodological issues that may arise in social science research, especially in cases where an author seeks to make some causal claim).

^{95.} Pam M.S. Nugent, *Selection Bias*, PSYCHOLOGY DICTIONARY: PROFESSIONAL REFERENCE (2013), https://psychologydictionary.org/selection-bias/ [https://perma.cc/BCB7-NFWJ].

^{96.} Jonathan E. Leightner & Tomoo Inoue, Solving the Omitted Variables Problem of Regression Analysis Using the Relative Vertical Position of Observations, 2012 ADVANCES

problems, since this Article accounts for the fact that zip codes may not be the same in important dimensions. It does so by putting each zip code, and group of zip codes, on the same scale by using percentage analysis to create standard units such as appeals rate, successful appeals rate, and win rate on appeal.

As such, as Professor James Lindgren explained in an article about whether there is distributional fairness by race, gender, ethnicity, and religion on certain law school faculties:

The crucial issue here is not disadvantaged groups, but underrepresented ones . . . Proportional representation is considered the approximate test of fairness, though few people urge exact proportional representation. The goal is a roughly equal distribution of demographic groups . . . [, as] significant underrepresentation of groups is typically assumed to be the result of discrimination.⁹⁷

One way to determine if the underrepresentation of disadvantaged groups stems from disfavored forms of discrimination, such as when discrimination is based upon characteristics such as race, income, or location, is to employ a valid application of percentage analysis as a test of allocational fairness. In contrast, percentage analysis also could be used as a gauge for distributional fairness, especially when used to establish whether overrepresentation or underrepresentation arises from unlawful discrimination. Within this context, this Article adopts the second approach so as to determine how disadvantaged zip codes are treated in Chicago and if any observable differences may be detected on the basis of race, income, or location in the target population.

DECISION SCI. 728980 (2012), https://www.hindawi.com/journals/ads/2012/728980/ [https://perma.cc/5WSB-V6WB]. This Article acknowledges that there are a number of possibly relevant variables, but it focuses upon the considerations that are most important for purposes of scholarly discussion.

^{97.} James Lindgren, *Measuring Diversity: Law Faculties in 1997 and 2013*, 39 HARV. J. L. & PUB. POL'Y. 89, 100–01 (2016). This Article accepts the possibility that small differences in treatment actually could matter, especially if the test for justice is allocational fairness rather than distributional fairness. Within this context, allocational fairness is defined to mean that justice is a function of the closeness of fit between the total contribution that is made by an individual citizen (such as taxes, user fees, and other payments that are transferred from a legal person to a government) and that the total benefits that are received in exchange from a government (such as public goods, public services, and other public benefits that are transferred from a government to a legal person). In cases where a citizen gives up more than she receives, then there is a deficit and this person receives less than their fair share. If a citizen receives more than they give up, then there is a subsidy and this person receives more than their fair share. When the amount that is paid by a citizen is exactly equal to the amount that is received, then there a complete offset and that person gets their fair share. The first two illustrations are examples of unjust outcomes, whereas the third illustration is an example of a more just outcome, at least when allocational fairness serves as the test for fairness.

IV. FINDINGS

This section draws on information about a subset of the twelve million parking tickets that were issued between fiscal years 2012 and 2016.⁹⁸ Next, it combines this data with other publicly-available data to compute several useful statistics.⁹⁹ Finally, the Article contextualizes each statistic: so as to find out if disadvantaged zip codes are treated the same as more advantaged zip codes in the study period.

The baseline for analysis is the average Chicago zip code, as determined by the use of the mean for the entire population of fifty-nine zip codes, which is estimated to have an appeals rate of 13.52 percent (i.e. the perceived error rate), a successful appeals rate of 8.44 percent (i.e. the actual error rate), and a win rate on appeal of 62.38 percent (i.e. the frequency that actual errors lead to dismissal of a parking ticket).

For the purposes of this Article, whether a group of zip codes is treated in a uniform way depends on if its group level average is exactly the same as the overall population average. As such, despite the fact that this Article does not try to determine if any observed differences are actually statistically significant, it is important to keep in mind that this preliminary finding is still useful, as it may serve as a point of departure for future work that does so using regression. For example, this future work could use t-test, analysis of variance or another method, in order to determine if any observed differences are actually statistically significant.¹⁰⁰

^{98.} *See* Brockway, *supra* note 54 ("Chicago issues an average of 2.4 million parking tickets annually [, regardless of whether the ticket recipient lives in the area]."). This Article focuses solely upon the 6,496,114 parking tickets that were issued to Chicagoland drivers, the 813,286 parking ticket appeals that were filed by Chicagoland drivers, and 510,234 successful parking ticket appeals that were ultimately granted to Chicagoland drivers between 2012 and 2016.

^{99.} See Department of Administrative Hearings, supra note 82; See Department of Finance, supra note 82. This Article actually includes information about both the mean and the median. The information about the mean is discussed in the text, whereas the information about the median is found in the footnotes. See infra Appendix at Tables D, E, and F. Cf. Johnson, supra note 26, at 515–16 ("The mean is the average of a series of numbers, whereas the median is the middle number. The mean and the median are both valid measures of central tendency, although their value often depends on the research question . . . The mean and the median are used for several, inter-related reasons. First, it is unclear whether [parking tickets, parking ticket appeals, and successful ticket appeals] . . . are skewed or normally distributed. Next, the uncertainty about the distribution . . . counsels for the use of the mean and the median. Lastly, these measures provide a wealth of information, especially about disproportionate treatment within a sample population.").

^{100.} An example of how this future research could be undertaken is provided by recent studies of the residential property tax appeals process, which employ coefficients of dispersion as part of more sophisticated empirical analyses. *See* Civic Consulting Alliance Board: An Affiliate Of The Civil Committee Of The Commercial Club of

Chicago, Residential Property Assessment In Cook County: Summary Of Analytical Findings, Unpublished Manuscript, Page 9, Note 1 (2018), https://www.ccachicago.org/wp-content/ uploads/2018/02/2018-Residential-Property-Analysis-Final.pdf [https://perma.cc/4KDK-WXYK] ("From the International Assessing Officers' (IAAO) standard on ratio studies. 'The

A. Race

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Chicago has 850,821 residents of African Descent, which makes up about thirtytwo percent of its 2,704,958 residents.¹⁰¹ These residents of African Descent (i.e. blacks), in comparison to residents of non-black extraction (others), are largely concentrated in a few zip codes.¹⁰² There are sixteen majority-black zip codes, whereas there are forty-three majority-other zip codes.

The 16 zip codes with a majority of black residents, at least when compared to the total population of 59 Chicago zip codes, experienced different treatment than predicted by the null hypothesis.¹⁰³ For example, the average majority-black zip code had an appeals rate 12.37 percent versus 13.52 percent for the average Chicago zip code.¹⁰⁴ The average majority-black zip code went on to have a successful appeals rate of 7.83 percent, in comparison to 8.44 percent for the average Chicago zip code.¹⁰⁵ The result is that the 16 zip codes with a majority of black residents are underrepresented in terms of their appeals rate (-1.15 percentage points) and successful appeals rate (-0.61 percentage points), as compared to the average Chicago zip code.¹⁰⁶

most generally useful measure of variability or uniformity is the COD [i.e. coefficient of dispersal]. The COD measures the average percentage deviation of the

ratios from the median ratio.'''); *See* Shekhar Mehta and Fred Giertz, Measuring the Performance of the Property Tax Assessment Process, 49 Nat. Tax J. 73, 83, Note 83 (1996), https://www.ntanet.org/NTJ/49/1/ntj-v49n01p73-85-measuring-performance-property-

tax.pdf?v=%CE%B1 [https://perma.cc/85M5-LMTK] ("The coefficient of

dispersion is given by the following formula: $\sum |a| i / s| i - (a/s) \mod |)/n(a/s) \mod .$ It is the average deviation of the actual sales assessment ratios (i.e., the ratio of assessed value (a) to actual selling price (s) as measured by sales assessment studies) from the median ratio (a/s) med divided by the overall median ratio.")

101. See U.S. Census, American Fact Finder, 2011–2015 ACS SURVEY 5–YEAR ESTIMATES (2017).

102. Compare infra Appendix at Table D-1 with infra Appendix at Table D-2; Compare infra Appendix at Table E-1 with infra Appendix at Table E-2; Compare infra Appendix at Table F-1 with infra Appendix at Table F-2. There were 2,172,578 parking tickets issued to residents of majority-black zip codes, 269,492 parking ticket appeals filed by residents of these zip codes, and 170,895 successful appeals by residents of these zip codes. In contrast, there were 4,323,536 parking tickets issued to residents of majority-other zip codes, 543,794 parking ticket appeals filed by residents of these zip codes, and 339,339 successful appeals by residents of these zip codes. See Department of Administrative Hearings, supra note 82; See Department of Finance, supra note 82.

103. *Compare infra* Appendix at Table D-1 *with infra* Appendix at Table D; *Compare infra* Appendix at Table E-1 *with infra* Appendix at Table E; *Compare infra* Appendix at Table F-1 *with infra* Appendix at Table F.

104. *Compare infra* Appendix at Table D-1 *with infra* Appendix at Table D. If medians are used, the average majority-black zip code has an appeals rate of 12.88 percent and the average Chicago zip code has an appeals rate of 13.16 percent.

105. *Compare infra* Appendix at Table E-1 *with infra* Appendix at Table E. If medians are used, the average majority-black zip code has a successful appeals rate of 8.08 percent and the average Chicago zip code has a successful appeals rate of 8.31 percent.

106. *Compare infra* Appendix at Table D-1 *with infra* Appendix at Table D; *Compare infra* Appendix at Table E-1 *with infra* Appendix at Table E. If medians are used, the difference is

The 43 zip codes with less than a majority of black residents, similarly, experienced different treatment than predicted by the null hypothesis.¹⁰⁷ For example, the average majority-other zip code had an appeals rate of 13.95 percent versus 13.52 percent for the average Chicago zip code.¹⁰⁸ The average majority-other zip code, then, went on to have a successful appeals rate of 8.66 percent in comparison to 8.44 percent for the average Chicago zip code.¹⁰⁹ The result is that the 43 zip codes with less than a majority of black residents are overrepresented, in terms of their appeals rate (+0.43 percentage points) and successful appeals rate (+0.22 percentage points).¹¹⁰

When win rates on appeal are considered, it is clear that both groups are treated differently from the average Chicago zip code.¹¹¹ Specifically, the 16 majority-black zip codes had a win rate on appeal of 63.49 percent, the 43 non-black zip codes had a win rate on appeal of 61.97 and the average Chicago zip code had a win rate on appeal of 62.38 percent.¹¹² As a result, both the 16 majority-black zip codes (+1.11 percentage points) and the 43 zip codes with majority-other zip codes are not treated in exactly the same way (-.41 percentage points) as the average zip code.¹¹³

108. *Compare infra* Appendix at Table D-2 *with infra* Appendix at Table D. If medians are used, the average majority-other zip code has an appeals rate of 14.59 percent and the average Chicago zip code has an appeals rate of 13.16 percent.

109. *Compare infra* Appendix at Table E-2 *with infra* Appendix at Table E. If medians are used, the average majority-other zip code has a successful appeals rate of 8.49 percent and the average Chicago zip code has a successful appeals rate of 8.31 percent.

110. *Compare infra* Appendix at Table D-2 *with infra* Appendix at Table D; *Compare infra* Appendix at Table E-2 *with infra* Appendix at Table E. If medians are used, the difference is +1.43 percentage points for the appeals rate and +.18 percentage points for the successful appeals rate.

111. Compare infra Appendix at Table D-1 with infra Appendix at Table D; Compare infra Appendix at Table E-1 with infra Appendix at Table E; Compare infra Appendix at Table F-1 with infra Appendix at Table F; Compare infra Appendix at Table D-2 with infra Appendix at Table D; Compare infra Appendix at Table E-2 with infra Appendix at Table E; Compare infra Appendix at Table E-2 with infra Appendix at Table E; Compare infra Appendix at Table E-2 with infra Appendix at Table E; Compare infra Appendix at Table E-2 with infra Appendix at Table E; Compare infra Appendix at Table E; Compare infra Appendix at Table E-2 with infra Appendix at Table E; Compare infra Appendix at Tab

112. *Compare infra* Appendix at Table F-1 *with infra* Appendix at Table F. If medians are used, the average majority-black zip code has a win rate on appeal of 63.62 and the average Chicago zip code has a win rate on appeal of 63.13 percent; *Compare infra* Appendix at Table F-2 *with infra* Appendix at Table F. If medians are used, the average majority-other zip code has a win rate on appeal of 61.79 and the average Chicago zip code has a win rate on appeal of 63.13 percent.

113. *Compare infra* Appendix at Table F-1 *with infra* Appendix at Table F. If medians are used, the difference is +49 percentage points between the average majority-black zip code and the average Chicago zip code; *Compare infra* Appendix at Table F-2 *with infra* Appendix at Table F. If medians are used, the difference is -1.34 percentage points between the average majority-other zip code and the average Chicago zip code.

^{-.28} percentage points for the appeals rate and -.23 percentage points for the successful appeals rate.

^{107.} *Compare infra* Appendix at Table D-2 *with infra* Appendix at Table D; *Compare infra* Appendix at Table E-2 *with infra* Appendix at Table E; *Compare infra* Appendix at Table F-2 *with infra* Appendix at Table F.

B. Income

Chicago has a median household income of \$48,522.¹¹⁴ Chicago residents that earn less than this amount (i.e. residents with lower-than-average incomes), and Chicago residents that earn more than \$48,522 (i.e. residents with higher-than-average incomes), often are segregated by zip code.¹¹⁵ There were 28 lower-income zip codes as well as 31 higher-income zip codes in Chicago.

The 28 zip codes with lower-than-average incomes, at least when compared to the entire population of 59 Chicago zip codes, experienced different treatment than predicted by the null hypothesis.¹¹⁶ For example, the average lower-income zip code had an appeals rate 12.63 percent versus 13.52 percent for the average Chicago zip code.¹¹⁷ The average lower-income zip code went on to have a successful appeals rate of 8.11 percent, in comparison to 8.44 percent for the average Chicago zip code.¹¹⁸ The result is that the 28 zip codes with lower-than-average incomes are underrepresented in terms of their appeals rate (-0.89 percentage points) and successful appeals rate (-0.33 percentage points).¹¹⁹

The 31 zip codes with higher-than-average incomes, similarly, experienced different treatment than predicted by the null hypothesis.¹²⁰ For example, the average higher-income zip code had an appeals rate of 14.32 percent versus 13.52 percent for the average Chicago zip code.¹²¹ The average higher-income zip code, then, went on to have a successful appeals rate of 8.73 percent in comparison to 8.44 percent for

116. *Compare infra* Appendix at Table D-3 *with infra* Appendix at Table D; *Compare infra* Appendix at Table E-3 *with infra* Appendix at Table E; *Compare infra* Appendix at Table F-3 *with infra* Appendix at Table F.

117. *Compare infra* Appendix at Table D-3 *with infra* Appendix at Table D. If medians are used, the average lower-income zip code has an appeals rate of 12.88 percent and the average Chicago zip code has an appeals rate of 13.16 percent.

118. *Compare infra* Appendix at Table E-3 *with infra* Appendix at Table E. If medians are used, the average lower-income zip code has a successful appeals rate of 8.08 percent and the average Chicago zip code has a successful appeals rate of 8.31 percent.

119. *Compare infra* Appendix at Table D-3 *with infra* Appendix at Table D; *Compare infra* Appendix at Table E-3 *with infra* Appendix at Table E. If medians are used, the difference is -.28 percentage points for the appeals rate and -.23 percentage points for the successful appeals rate.

^{114.} See U.S. Census, supra note 101.

^{115.} *Id.* There were 4,098,836 parking tickets issued to residents of lower-income zip codes, 486,256 parking ticket appeals filed by residents of these zip codes, and 311,225 successful appeals by residents of these zip codes. In contrast, there were 2,397,278 parking tickets issued to residents of higher-income zip codes, 327,030 parking ticket appeals filed by residents of these zip codes, and 199,009 successful appeals by residents of these zip codes. *See* Department of Administrative Hearings, *supra* note 82; *See* Department of Finance, *supra* note 82.

^{120.} *Compare infra* Appendix at Table D-4 *with infra* Appendix at Table D; *Compare infra* Appendix at Table E-4 *with infra* Appendix at Table E; *Compare infra* Appendix at Table F-4 *with infra* Appendix at Table F.

^{121.} *Compare infra* Appendix at Table D-4 *with infra* Appendix at Table D. If medians are used, the average higher-Income zip code has an appeals rate of 14.54 percent and the average Chicago zip code has an appeals rate of 13.16 percent.

the average Chicago zip code.¹²² The result is that the 31 zip codes with higher-thanaverage incomes are overrepresented, in terms of their appeals rate (+0.80 percentage points) and successful appeals rate (+0.29 percentage points), as compared to the average zip code.¹²³

When win rates on appeal are considered, it is clear that both groups are treated differently from the average Chicago zip code.¹²⁴ Specifically, the 28 lower-income zip codes had a win rate on appeal of 64.09 percent, the 31 higher-income zip codes had a win rate on appeal of 60.84, and the average Chicago zip code had a win rate on appeal of 62.38 percent.¹²⁵ As a result, both the 28 lower-income zip codes (+1.71 percentage points) and the 31 higher-income zip codes are not treated in exactly the same way (-1.54 percentage points) as the average Chicago zip code.¹²⁶

C. Location

Chicago has long been segregated, especially based on location, which some researchers believe leads to differential provision of public goods and services.¹²⁷ The two major geographic areas in Chicago, which are separated by Madison Street, are the South Side and the North Side.¹²⁸ Using this traditional dividing line, there are 25 South Side zip codes and 34 North Side zip codes.

122. *Compare infra* Appendix at Table E-4 *with infra* Appendix at Table E. If medians are used, the average higher-Income zip code has a successful appeals rate of 8.47 percent and the average Chicago zip code has a successful appeals rate of 8.31 percent.

123. *Compare infra* Appendix at Table D-4 *with infra* Appendix at Table D; *Compare infra* Appendix at Table E-4 *with infra* Appendix at Table E. If medians are used, the difference is +1.38 percentage points for the appeals rate and +.16 percentage points for the successful appeals rate.

124. Compare infra Appendix at Table D-1 with infra Appendix at Table D; Compare infra Appendix at Table E-1 with infra Appendix at Table E; Compare infra Appendix at Table F-1 with infra Appendix at Table F; Compare infra Appendix at Table D-2 with infra Appendix at Table D; Compare infra Appendix at Table E-2 with infra Appendix at Table E; Compare infra Appendix at Table E-2 with infra Appendix at Table E; Compare infra Appendix at Table E-2 with infra Appendix at Table E; Compare infra Appendix at Table E-2 with infra Appendix at Table E; Compare infra Appendix at Table E; Compare infra Appendix at Table E-2 with infra Appendix at Table E; Compare infra Appendix at Tab

125. *Compare infra* Appendix at Table F-1 *with infra* Appendix at Table F. If medians are used, the average lower-income zip code has a win rate on appeal of 64.10 percent and the average Chicago zip code has a win rate on appeal of 63.13 percent; *Compare infra* Appendix at Table F-2 *with infra* Appendix at Table F. If medians are used, the average higher-income zip code has a win rate on appeal of 60.39 percent and the average Chicago zip code has a win rate on appeal of 63.13 percent.

126. *Compare infra* Appendix at Table F-1 *with infra* Appendix at Table F. If medians are used, the difference is +.97 percentage points between the average lower-income zip code and the average Chicago zip code; *Compare infra* Appendix at Table F-2 *with infra* Appendix at Table F. If medians are used, the difference is -2.73 percentage points between the average higher-income zip code and the average Chicago zip code.

127. *See, e.g.*, Sampson, *supra* note 31, at 6 ("Spatially inscribed social differences, I argue, constitute a family of 'neighborhood effects' that are pervasive, strong, cross-cutting, and paradoxically stable even as they are changing in manifest form.").

128. See ENCYCLOPEDIA OF CHICAGO, Street Naming, CHICAGOHISTORY.ORG (2005), http://www.encyclopedia.chicagohistory.org/pages/1205.html [https://perma.cc/872G-VMYF] (In 1901, building superintendent Edward P. Brennan ... suggested that Chicago be ordered as a large grid with a uniform street numbering system, and proposed State and The 25 zip codes that are entirely on the South Side, at least when compared to the full population of 59 Chicago zip codes, are not treated in exactly the same way as the average local zip code.¹²⁹ For example, the average South Side zip code had an appeals rate of 12.51 percent versus 13.52 percent for the average Chicago zip code.¹³⁰ The average South Side zip code went on to have a successful appeals rate of 7.76 percent, in comparison to 8.44 percent for the average Chicago zip code.¹³¹ The result is that the 25 zip codes that are entirely on the South Side are underrepresented in terms of their appeals rate (-1.01 percentage points) and successful appeals rate (-0.68 percentage points).¹³²

The remaining 34 zip codes that are on the North Side, similarly, are not treated in exactly the same way.¹³³ For example, the average North Side zip code had an appeals rate of 14.26 percent versus 13.52 percent for the average Chicago zip code.¹³⁴ The average North Side zip code, then, went on to have a successful appeals rate of 8.94 percent in comparison to 8.44 percent for the average Chicago zip code.¹³⁵ The result is that the 34 North Side zip codes are overrepresented, in terms of their appeals rate (+0.74 percentage points) and successful appeals rate (+.50 percentage points), as compared to the average Chicago zip code.¹³⁶

Madison Streets as the city's primary north-south and east-west axes."). There were 3,100,115 parking tickets issued to residents of South Side zip codes, 357,840 parking ticket appeals filed by residents of these zip codes, and 224,075 successful appeals by residents of these zip codes. In contrast, there were 3,395,999 parking tickets issued to residents of North Side zip codes, 455,446 parking ticket appeals filed by residents of these zip codes, and 286,159 successful appeals by residents of these zip codes. *See* Department of Administrative Hearings, *supra* note 82; *See* Department of Finance, *supra* note 82.

129. *Compare infra* Appendix at Table D-5 *with infra* Appendix at Table D; *Compare infra* Appendix at Table E-5 *with infra* Appendix at Table E; *Compare infra* Appendix at Table F-5 *with infra* Appendix at Table F.

130. *Compare infra* Appendix at Table D-5 *with infra* Appendix at Table D. If medians are used, the average South Side zip code has an appeals rate of 13.06 percent and the average Chicago zip code has an appeals rate of 13.16 percent.

131. *Compare infra* Appendix at Table E-5 *with infra* Appendix at Table E. If medians are used, the average South Side zip code has a successful appeals rate of 8.14 percent and the average Chicago zip code has a successful appeals rate of 8.31 percent.

132. *Compare infra* Appendix at Table D-5 *with infra* Appendix at Table D; *Compare infra* Appendix at Table E-5 *with infra* Appendix at Table E. If medians are used, the difference is -.10 percent for the appeals rate and -.17 percent for the successful appeals rate.

133. *Compare infra* Appendix at Table D-6 *with infra* Appendix at Table D; *Compare infra* Appendix at Table E-6 *with infra* Appendix at Table E; *Compare infra* Appendix at Table F-6 *with infra* Appendix at Table F.

134. *Compare infra* Appendix at Table D-6 *with infra* Appendix at Table D. If medians are used, the average North Side zip code has an appeals rate of 14.72 percent and the average Chicago zip code has an appeals rate of 13.16 percent.

135. *Compare infra* Appendix at Table E-6 *with infra* Appendix at Table E. If medians are used, the average North Side zip code has a successful appeals rate of 8.56 percent and the average Chicago zip code has a successful appeals rate of 8.31 percent.

136. *Compare infra* Appendix at Table D-6 *with infra* Appendix at Table D; *Compare infra* Appendix at Table E-6 *with infra* Appendix at Table E. If medians are used, the difference is +1.56 percentage points for the appeals rate and +.25 percentage points for the successful appeals rate.

When win rates on appeal are considered, it is clear that both groups are treated in almost the same way as the average Chicago zip code.¹³⁷ Specifically, the 25 South Side zip codes had a win rate on appeal of 62.26 percent, the 34 North Side zip codes had a win rate on appeal of 62.47, and the average Chicago zip code had a win rate on appeal of 62.38 percent.¹³⁸ As a result, both the 25 South Side zip codes (-0.12 percentage points) and the 34 North Side zip codes are treated in a substantiallysimilar way (+.09 percentage points) to the average Chicago zip code.¹³⁹

V. ANALYSIS

This Article finds that all three groups of disadvantaged zip codes, the 16 majority-black zip codes, the 28 lower-income zip codes, and the 25 South Side zip codes are underrepresented with respect to almost every measure of distributional fairness.¹⁴⁰ These findings arise from the fact that all three groups of zip codes are treated differently than the average Chicago zip code, except in the case of the South Side zip codes' win rate on appeal.¹⁴¹ Thus, it is clear that the Article's null hypothesis is almost always rejected with respect to the 16 majority-black zip codes, the 28 lower-income zip codes, and the 25 South Side zip codes, which is to say that there may have been some "personalization" of the law during the study period. The surprise is how disadvantaged zip codes were treated differently; there was a lower appeals rate, a lower successful appeals rate than expected for each, and a higher win rate on appeal than expected for two of the three groups of zip codes.

These findings indicate that more advantaged zip codes may have higher administrative costs, and lower parking ticket error rates, than disadvantaged zip

^{137.} Compare infra Appendix at Table D-1 with infra Appendix at Table D; Compare infra Appendix at Table E-1 with infra Appendix at Table E; Compare infra Appendix at Table F-1 with infra Appendix at Table F; Compare infra Appendix at Table D-2 with infra Appendix at Table D; Compare infra Appendix at Table E-2 with infra Appendix at Table E; Compare infra Appendix at Table F-2 with infra Appendix at Table F.

^{138.} Compare infra Appendix at Table F-1 with infra Appendix at Table F. If medians are used, the average South Side zip code has a win rate on appeal of 63.13 percent and the average Chicago zip code has a win rate on appeal of 63.13 percent; *Compare infra* Appendix at Table F-2 with infra Appendix at Table F. If medians are used, the average North Side zip code has a win rate on appeal of 63.02 percent and the average Chicago zip code has a win rate on appeal of 63.13 percent.

^{139.} Compare infra Appendix at Table F-1 with infra Appendix at Table F. If medians are used, the difference is 0 between the average South Side zip code and the average Chicago zip code; Compare infra Appendix at Table F-2 with infra Appendix at Table F. If medians are used, the difference is -.11 percentage points between the average North Side zip code and the average Chicago zip code.

^{140.} Compare infra Appendix at Table D-1 with infra Appendix at Table D; Compare infra Appendix at Table E-1 with infra Appendix at Table E; Compare infra Appendix at Table F-1 with infra Appendix at Table F; Compare infra Appendix at Table D-3 with infra Appendix at Table D; Compare infra Appendix at Table E-3 with infra Appendix at Table E; Compare infra Appendix at Table F-3 with infra Appendix at Table F; Compare infra Appendix at Table D-5 with infra Appendix at Table D; Compare infra Appendix at Table E-5 with infra Appendix at Table E; Compare infra Appendix at Table F-5 with infra Appendix at Table F.

codes during the study period. Therefore, it stands to reason that the parking ticket appeals process may be more cost-justified for disadvantaged zip codes than for more advantaged zip codes in Chicago, at least when cost is measured in terms of the relationship between what is being spent in detecting errors (the sum of administrative costs, such as the initial set-up costs and the recurring costs of carrying out appeals work, which may be understood to be functions of the appeals rate and successful appeals rate) and what is spent in correcting errors (the cost of dealing with errors in ticket issuance, which are functions of win rate on appeal.)

The normative implications, in contrast, are much more straightforward. For example, Chicago should find out why disadvantaged zip codes appeal less than would be predicted, according to this Article's null hypothesis, despite the fact that two of the three groups had higher win rates on appeal, so as to eliminate any unaccounted barriers to filing a parking ticket appeal. It also should identify some of the possible reasons that disadvantaged zip codes had a lower successful appeals rate than expected, perhaps by asking if public employees acted on implicit biases or in keeping with their training.¹⁴² Lastly, Chicago should undertake random audits: so as to detect any patterns of discrimination that may explain the differences in win rates on appeal.

Discrimination in appeal decisions, regardless of if it is due to intentional or negligent conduct, should not be tolerated. There are three reasons why, which are informed by concerns about the incentive structure for public sector employees. First, any tolerance of unlawful discrimination encourages moral hazard or the idea that individuals "are less likely to take good care . . . than if they were uninsured [against loss]."¹⁴³ It also may prevent the parking ticket appeals process from becoming horizontally and vertically equitable, which are two ways of assuring uniform treatment.¹⁴⁴ Lastly, the tolerance of discrimination increases transaction costs or "the cost[s] incurred in undertaking an economic exchange."¹⁴⁵ As a result, if all three reforms are taken up, the parking ticket appeals process could become a true exemplar of fairness.

^{142.} See Lisa Parker, City Law Judge Who Handles Parking Ticket Appeals Gets Retrained After Investigation, NBC CHICAGO (Feb. 9, 2015), http://www.nbcchicago.com/investigations/The-Uphill-Battle-to-Prove-Parking-Tickets-Unfair-291346331.html ("An investigation of the city's parking ticket appeals process . . . has resulted in the 'retraining' of an attorney that handles thousands of parking ticket cases every year.").

^{143.} See supra note 51, at 270.

^{144.} Similar concerns about unjustified grants of relief have been raised with respect to property tax appeals. *See, e.g.*, Rachel N. Weber & Daniel P. McMillen, *Ask and Ye Shall Receive? Predicting the Successful Appeal of Property Tax Assessments,* 38 PUB. FIN. REV. 74 (2010) ("Appeals could make property tax assessments less uniform and violate the principle of *horizontal* equity, which assumes that two taxpayers with identical houses receive the same assessment . . . Appeals also could make the distribution of the property tax less *vertically* equitable and even 'regressive' if applications and successful appeals were correlated with higher-valued properties—either because owners of higher-valued homes were more likely to appeal or because assessors were more likely to grant relief.").

^{145.} See supra note 51, at 414.

VI. CONCLUSION

This Article finds that disadvantaged zip codes, regardless of whether disadvantaged is defined in terms of race, income, or location, often are treated differently than the average Chicago zip code. This finding is based initially on the fact that the 16 majority-black zip codes had less than the expected parking ticket appeals rate (-1.15 percentage points),¹⁴⁶ less than the expected successful appeals rate (-0.61 percentage points),¹⁴⁷ and more than the expected win rate on appeal (+1.11 percentage points).¹⁴⁸ It also is supported by the fact that the 28 lower-income zip codes also had less than the expected parking ticket appeals rate (-0.89 percentage points),¹⁴⁹ less than the expected successful appeals rate (-0.33 percentage points),¹⁵⁰ and more than the expected win rate on appeal (+1.71 percentage points).¹⁵¹ Finally, it is further substantiated by the fact that the 25 South Side zip codes had less than the expected parking ticket appeals rate (-1.01 percentage points),¹⁵² less than the expected successful appeals rate (-0.68 percentage points),¹⁵³ and about the same expected win rate on appeal (-0.12 percentage points).¹⁵⁴ The Article, therefore, concludes that disadvantaged zip codes often are treated differently, albeit in unexpected ways (i.e. there was a lower appeals rate and lower successful appeals rate than expected for all three disadvantaged groups, as well as a higher win rate on appeal than expected for two of the three disadvantaged groups).

This preliminary conclusion indicates that there may have been some personalization of the law and that such an approach is not cost-justified. More research, however, is needed to find out whether personalization actually leads to statistically-significant differences in terms of how zip codes are treated in Chicago. This research should be sure to account for the fact that the type of parking ticket, the dollar amount of each parking ticket and the theory of the case on appeal may yield useful insights into why there may be observed differences in the treatment received by zip codes over time.

^{146.} *Compare infra* Appendix at Table D-1 *with infra* Appendix at Table D. If medians are used, the difference is -.28 percentage points for the appeals rate.

^{147.} *Compare infra* Appendix at Table E-1 *with infra* Appendix at Table E. If medians are used, the difference is -.23 percentage points for the successful appeals rate.

^{148.} *Compare infra* Appendix at Table F-1 *with infra* Appendix at Table F. If medians are used, the difference is +.49 percentage points for the win rate on appeal.

^{149.} *Compare infra* Appendix at Table D-3 *with infra* Appendix at Table D. If medians are used, the difference is -.28 percentage points for the appeals rate.

^{150.} *Compare infra* Appendix at Table E-3 *with infra* Appendix at Table E. If medians are used, the difference is -.23 percentage points for the successful appeals rate.

^{151.} *Compare infra* Appendix at Table F-3 *with infra* Appendix at Table F. If medians are used, the difference is +.97 percentage points for the win rate on appeal.

^{152.} *Compare infra* Appendix at Table D-5 *with infra* Appendix at Table D. If medians are used, the difference is -.10 percentage points for the appeals rate.

^{153.} *Compare infra* Appendix at Table E-5 *with infra* Appendix at Table E. If medians are used, the difference is -.17 percentage points for the successful appeals rate.

^{154.} *Compare infra* Appendix at Table F-5 *with infra* Appendix at Table F. If medians are used, the difference is 0 for the win rate on appeal.

PART VII: APPENDIX

A. Parking Tickets, By All 59 City of Chicago Zip Codes, Fiscal Years 2012 to 2016

Zip	Race	Income	Location	2012	2013	2014	2015	2016	2012-2016
60601	6.8	102254	Northside	3,374	3,421	2,853	2,913	3,055	15,616
60602	11.1	57368	Northside	811	701	638	605	617	3,372
60603	2.8	122031	Northside	571	656	586	550	564	2,927
60604	7.4	151731	Northside	550	539	578	541	614	2,822
60605	18.6	87668	Southside	8,387	7,678	6,868	7,419	7,023	37,375
60606	4.3	106661	Northside	1,573	1,575	1,351	1,311	1,254	7,064
60607	16.3	85917	Southside	11,291	11,403	10,876	10,779	10,161	54,510
60608	18.2	36216	Southside	39,590	40,762	38,409	38,814	37,270	194,845
60609	28.9	32284	Southside	32,537	36,072	30,915	34,632	30,369	164,525
60610	18.2	75892	Northside	14,634	14,697	13,308	13,677	13,228	69,544
60611	4.4	87280	Northside	7,737	8,000	7,087	6,533	6,641	35,998
60612	61.7	35888	Northside	20,612	23,468	21,707	21,299	19,684	106,770
60613	7.8	72126	Northside	24,260	23,756	21,646	22,419	23,439	115,520
60614	3.9	92714	Northside	31,270	29,516	27,373	26,047	26,908	141,114
60615	62.0	41108	Southside	21,341	24,150	21,524	23,597	21,156	111,768
60616	26.0	42594	Southside	25,603	23,114	22,638	23,422	22,384	117,161
60617	56.2	37796	Southside	36,308	40,218	37,571	37,190	30,469	181,756
60618	3.5	57500	Northside	47,834	50,205	47,629	49,973	47,955	243,596
60619	97.4	32239	Southside	35,703	39,959	37,700	40,249	32,779	186,390
60620	98.1	32168	Southside	37,293	40,724	38,859	41,680	35,373	193,929
60621	97.9	19832	Southside	18,110	20,090	19,228	20,003	15,712	93,143
60622	8.3	75163	Northside	38,085	38,260	35,317	35,048	34,945	181,655
60623	33.5	28091	Southside	48,357	53,560	51,005	47,291	43,195	243,408
60624	95.3	22204	Northside	21,979	27,568	26,806	25,678	22,311	124,342
60625	4.7	56507	Northside	38,174	37,935	35,426	37,266	35,831	184,632
60626	25.9	36439	Northside	27,423	27,537	25,037	25,116	23,625	128,738
60628	94.7	36242	Southside	33,451	36,800	36,110	36,186	29,727	172,274
60629	23.0	40712	Southside	53,689	55,169	52,065	52,738	46,691	260,352

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60630	1.4	62244	Northside	17,931	18,338	18,089	18,432	17,529	90,319
60631	0.5	76400	Northside	5,061	5,291	5,183	5,352	5,662	26,549
60632	2.1	38438	Southside	43,762	44,156	41,562	39,645	38,058	207,183
60633	4.8	47136	Southside	2,710	3,041	3,050	3,141	2,421	14,363
60634	1.4	56382	Northside	21,214	21,315	21,733	22,298	22,678	109,238
60636	96.3	27871	Southside	23,884	24,721	25,245	26,273	21,041	121,164
60637	78.6	26845	Southside	25,116	29,401	27,975	27,998	22,663	133,153
60638	4.0	62511	Southside	13,153	14,255	12,969	13,429	13,573	67,379
60639	16.6	38798	Northside	48,598	50,876	49,950	50,690	49,536	249,650
60640	18.1	47631	Northside	31,624	30,692	28,681	30,454	29,696	151,147
60641	2.8	51597	Northside	33,737	34,016	33,373	34,180	34,724	170,030
60642	11.0	79633	Southside	12,331	12,407	11,786	11,786	11,398	59,708
60643	74.5	59593	Southside	20,474	21,905	21,234	22,291	18,103	104,007
60644	94.3	26882	Northside	27,287	35,269	34,752	33,048	26,698	157,054
60645	14.9	47633	Northside	20,793	20,789	19,337	20,375	19,553	100,847
60646	0.8	73246	Northside	6,909	7,428	6,764	6,667	6,841	34,609
60647	7.4	56257	Northside	53,854	54,102	52,289	52,196	49,995	262,436
60649	95.5	26797	Southside	27,592	31,351	28,869	31,168	26,976	145,956
60651	63.7	32006	Northside	36,986	45,153	42,482	40,526	37,662	202,809
60652	45.8	61797	Southside	14,665	15,826	14,657	15,450	13,486	74,084
60653	93.8	25923	Southside	17,120	19,208	19,299	19,754	18,375	93,756
60654	7.3	90520	Northside	6,262	6,096	5,613	5,300	5,282	28,553
60655	7.7	87105	Southside	4,763	4,685	4,407	5,095	4,669	23,619
60656	1.8	57308	Northside	6,545	7,057	6,305	6,534	7,023	33,464
60657	2.8	79638	Northside	29,018	27,429	24,684	25,038	25,855	132,024
60659	8.9	48104	Northside	21,423	21,564	20,836	21,943	21,389	107,155
60660	15.7	41412	Northside	19,820	18,869	17,288	18,130	16,784	90,891
60661	6.9	98882	Northside	2,977	3,000	2,784	2,858	2,623	14,242
60706	0.7	52429	Northside	3,299	3,269	3,076	3,299	3,681	16,624
60707	16.5	54669	Northside	10,829	10,841	10,778	11,169	11,031	54,648
60827	96.8	31063	Southside	8,190	9,203	9,773	9,330	7,811	44,307
X	x	х	Chicago	1,298,474	1,369,086	1,295,933	1,316,825	1,215,796	6,496,114
L		i		i	1	1	1	i	

Zip	Race	Income	Location	2012	2013	2014	2015	2016	2012-2016
60612	61.7	35888	Northside	20,612	23,468	21,707	21,299	19,684	106,770
60615	62.0	41108	Southside	21,341	24,150	21,524	23,597	21,156	111,768
60617	56.2	37796	Southside	36,308	40,218	37,571	37,190	30,469	181,756
60619	97.4	32239	Southside	35,703	39,959	37,700	40,249	32,779	186,390
60620	98.1	32168	Southside	37,293	40,724	38,859	41,680	35,373	193,929
60621	97.9	19832	Southside	18,110	20,090	19,228	20,003	15,712	93,143
60624	95.3	22204	Northside	21,979	27,568	26,806	25,678	22,311	124,342
60628	94.7	36242	Southside	33,451	36,800	36,110	36,186	29,727	172,274
60636	96.3	27871	Southside	23,884	24,721	25,245	26,273	21,041	121,164
60637	78.6	26845	Southside	25,116	29,401	27,975	27,998	22,663	133,153
60643	74.5	59593	Southside	20,474	21,905	21,234	22,291	18,103	104,007
60644	94.3	26882	Northside	27,287	35,269	34,752	33,048	26,698	157,054
60649	95.5	26797	Southside	27,592	31,351	28,869	31,168	26,976	145,956
60651	63.7	32006	Northside	36,986	45,153	42,482	40,526	37,662	202,809
60653	93.8	25923	Southside	17,120	19,208	19,299	19,754	18,375	93,756
60827	96.8	31063	Southside	8,190	9,203	9,773	9,330	7,811	44,307
х	х	х	16 Zip Codes	411,446	469,188	449,134	456,270	386,540	2,172,578
х	x	x	Chicago	1,298,474	1,369,086	1,295,933	1,316,825	1,215,796	6,496,114

1. Parking Tickets, By 16 Majority-Black Zip Codes (RACE), 2012 to 2016

2. Parking Tickets, By 43 Majority-Other Zip Codes (RACE), 2012 to 2016

Zip	Race	Income	Location	2012	2013	2014	2015	2016	2012-2016
60601	6.8	102254	Northside	3,374	3,421	2,853	2,913	3,055	15,616
60602	11.1	57368	Northside	811	701	638	605	617	3,372
60603	2.8	122031	Northside	571	656	586	550	564	2,927
60604	7.4	151731	Northside	550	539	578	541	614	2,822
60605	18.6	87668	Southside	8,387	7,678	6,868	7,419	7,023	37,375
60606	4.3	106661	Northside	1,573	1,575	1,351	1,311	1,254	7,064
60607	16.3	85917	Southside	11,291	11,403	10,876	10,779	10,161	54,510
60608	18.2	36216	Southside	39,590	40,762	38,409	38,814	37,270	194,845

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60609	28.9	32284	Southside	32,537	36,072	30,915	34,632	30,369	164,525
60610	18.2	75892	Northside	14,634	14,697	13,308	13,677	13,228	69,544
60611	4.4	87280	Northside	7,737	8,000	7,087	6,533	6,641	35,998
60613	7.8	72126	Northside	24,260	23,756	21,646	22,419	23,439	115,520
60614	3.9	92714	Northside	31,270	29,516	27,373	26,047	26,908	141,114
60616	26.0	42594	Southside	25,603	23,114	22,638	23,422	22,384	117,161
60618	3.5	57500	Northside	47,834	50,205	47,629	49,973	47,955	243,596
60622	8.3	75163	Northside	38,085	38,260	35,317	35,048	34,945	181,655
60623	33.5	28091	Southside	48,357	53,560	51,005	47,291	43,195	243,408
60625	4.7	56507	Northside	38,174	37,935	35,426	37,266	35,831	184,632
60626	25.9	36439	Northside	27,423	27,537	25,037	25,116	23,625	128,738
60629	23.0	40712	Southside	53,689	55,169	52,065	52,738	46,691	260,352
60630	1.4	62244	Northside	17,931	18,338	18,089	18,432	17,529	90,319
60631	0.5	76400	Northside	5,061	5,291	5,183	5,352	5,662	26,549
60632	2.1	38438	Southside	43,762	44,156	41,562	39,645	38,058	207,183
60633	4.8	47136	Southside	2,710	3,041	3,050	3,141	2,421	14,363
60634	1.4	56382	Northside	21,214	21,315	21,733	22,298	22,678	109,238
60638	4.0	62511	Southside	13,153	14,255	12,969	13,429	13,573	67,379
60639	16.6	38798	Northside	48,598	50,876	49,950	50,690	49,536	249,650
60640	18.1	47631	Northside	31,624	30,692	28,681	30,454	29,696	151,147
60641	2.8	51597	Northside	33,737	34,016	33,373	34,180	34,724	170,030
60642	11.0	79633	Southside	12,331	12,407	11,786	11,786	11,398	59,708
60645	14.9	47633	Northside	20,793	20,789	19,337	20,375	19,553	100,847
60646	0.8	73246	Northside	6,909	7,428	6,764	6,667	6,841	34,609
60647	7.4	56257	Northside	53,854	54,102	52,289	52,196	49,995	262,436
60652	45.8	61797	Southside	14,665	15,826	14,657	15,450	13,486	74,084
60654	7.3	90520	Northside	6,262	6,096	5,613	5,300	5,282	28,553
60655	7.7	87105	Southside	4,763	4,685	4,407	5,095	4,669	23,619
60656	1.8	57308	Northside	6,545	7,057	6,305	6,534	7,023	33,464
60657	2.8	79638	Northside	29,018	27,429	24,684	25,038	25,855	132,024
60659	8.9	48104	Northside	21,423	21,564	20,836	21,943	21,389	107,155
60660	15.7	41412	Northside	19,820	18,869	17,288	18,130	16,784	90,891
60661	6.9	98882	Northside	2,977	3,000	2,784	2,858	2,623	14,242
60706	0.7	52429	Northside	3,299	3,269	3,076	3,299	3,681	16,624
L	i	1	1		1	1	0	1	1

60707	16.5	54669	Northside	10,829	10,841	10,778	11,169	11,031	54,648
х	х	Х	43 Zip Codes	887,028	899,898	846,799	860,555	829,256	4,323,536
х	Х	Х	Chicago	1,298,474	1,369,086	1,295,933	1,316,825	1,215,796	6,496,114

3. Parking Tickets, By 28 Lower-Income Zip Codes (INCOME), 2012 to 2016

Zip	Race	Income	Location	2012	2013	2014	2015	2016	2012-2016
60608	18.2	36216	Southside	39,590	40,762	38,409	38,814	37,270	194,845
60609	28.9	32284	Southside	32,537	36,072	30,915	34,632	30,369	164,525
60612	61.7	35888	Northside	20,612	23,468	21,707	21,299	19,684	106,770
60615	62.0	41108	Southside	21,341	24,150	21,524	23,597	21,156	111,768
60616	26.0	42594	Southside	25,603	23,114	22,638	23,422	22,384	117,161
60617	56.2	37796	Southside	36,308	40,218	37,571	37,190	30,469	181,756
60619	97.4	32239	Southside	35,703	39,959	37,700	40,249	32,779	186,390
60620	98.1	32168	Southside	37,293	40,724	38,859	41,680	35,373	193,929
60621	97.9	19832	Southside	18,110	20,090	19,228	20,003	15,712	93,143
60623	33.5	28091	Southside	48,357	53,560	51,005	47,291	43,195	243,408
60624	95.3	22204	Northside	21,979	27,568	26,806	25,678	22,311	124,342
60626	25.9	36439	Northside	27,423	27,537	25,037	25,116	23,625	128,738
60628	94.7	36242	Southside	33,451	36,800	36,110	36,186	29,727	172,274
60629	23.0	40712	Southside	53,689	55,169	52,065	52,738	46,691	260,352
60632	2.1	38438	Southside	43,762	44,156	41,562	39,645	38,058	207,183
60633	4.8	47136	Southside	2,710	3,041	3,050	3,141	2,421	14,363
60636	96.3	27871	Southside	23,884	24,721	25,245	26,273	21,041	121,164
60637	78.6	26845	Southside	25,116	29,401	27,975	27,998	22,663	133,153
60639	16.6	38798	Northside	48,598	50,876	49,950	50,690	49,536	249,650
60640	18.1	47631	Northside	31,624	30,692	28,681	30,454	29,696	151,147
60644	94.3	26882	Northside	27,287	35,269	34,752	33,048	26,698	157,054
60645	14.9	47633	Northside	20,793	20,789	19,337	20,375	19,553	100,847
60649	95.5	26797	Southside	27,592	31,351	28,869	31,168	26,976	145,956
60651	63.7	32006	Northside	36,986	45,153	42,482	40,526	37,662	202,809
60653	93.8	25923	Southside	17,120	19,208	19,299	19,754	18,375	93,756
60659	8.9	48104	Northside	21,423	21,564	20,836	21,943	21,389	107,155
60660	15.7	41412	Northside	19,820	18,869	17,288	18,130	16,784	90,891

ſ	60827	96.8	31063	Southside	8,190	9,203	9,773	9,330	7,811	44,307
	Х	х	х	28 Zip Codes	806,901	873,484	828,673	840,370	749,408	4,098,836
Γ	Х	Х	х	Chicago	1,298,474	1,369,086	1,295,933	1,316,825	1,215,796	6,496,114
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4. Parking Tickets, By 31 Higher-Income Zip Codes (INCOME), 2012 to 2016

Zip	Race	Income	Location	2012	2013	2014	2015	2016	2012-2016
60601	6.8	102254	Northside	3,374	3,421	2,853	2,913	3,055	15,616
60602	11.1	57368	Northside	811	701	638	605	617	3,372
60603	2.8	122031	Northside	571	656	586	550	564	2,927
60604	7.4	151731	Northside	550	539	578	541	614	2,822
60605	18.6	87668	Southside	8,387	7,678	6,868	7,419	7,023	37,375
60606	4.3	106661	Northside	1,573	1,575	1,351	1,311	1,254	7,064
60607	16.3	85917	Southside	11,291	11,403	10,876	10,779	10,161	54,510
60610	18.2	75892	Northside	14,634	14,697	13,308	13,677	13,228	69,544
60611	4.4	87280	Northside	7,737	8,000	7,087	6,533	6,641	35,998
60613	7.8	72126	Northside	24,260	23,756	21,646	22,419	23,439	115,520
60614	3.9	92714	Northside	31,270	29,516	27,373	26,047	26,908	141,114
60618	3.5	57500	Northside	47,834	50,205	47,629	49,973	47,955	243,596
60622	8.3	75163	Northside	38,085	38,260	35,317	35,048	34,945	181,655
60625	4.7	56507	Northside	38,174	37,935	35,426	37,266	35,831	184,632
60630	1.4	62244	Northside	17,931	18,338	18,089	18,432	17,529	90,319
60631	0.5	76400	Northside	5,061	5,291	5,183	5,352	5,662	26,549
60634	1.4	56382	Northside	21,214	21,315	21,733	22,298	22,678	109,238
60638	4.0	62511	Southside	13,153	14,255	12,969	13,429	13,573	67,379
60641	2.8	51597	Northside	33,737	34,016	33,373	34,180	34,724	170,030
60642	11.0	79633	Southside	12,331	12,407	11,786	11,786	11,398	59,708
60643	74.5	59593	Southside	20,474	21,905	21,234	22,291	18,103	104,007
60646	0.8	73246	Northside	6,909	7,428	6,764	6,667	6,841	34,609
60647	7.4	56257	Northside	53,854	54,102	52,289	52,196	49,995	262,436
60652	45.8	61797	Southside	14,665	15,826	14,657	15,450	13,486	74,084
60654	7.3	90520	Northside	6,262	6,096	5,613	5,300	5,282	28,553
60655	7.7	87105	Southside	4,763	4,685	4,407	5,095	4,669	23,619
60656	1.8	57308	Northside	6,545	7,057	6,305	6,534	7,023	33,464

60657	2.8	79638	Northside	29,018	27,429	24,684	25,038	25,855	132,024
60661	6.9	98882	Northside	2,977	3,000	2,784	2,858	2,623	14,242
60706	0.7	52429	Northside	3,299	3,269	3,076	3,299	3,681	16,624
60707	16.5	54669	Northside	10,829	10,841	10,778	11,169	11,031	54,648
Х	х	х	31 Zip Codes	491,573	495,602	467,260	476,455	466,388	2,397,278
Х	х	х	Chicago	1,298,474	1,369,086	1,295,933	1,316,825	1,215,796	6,496,114

Zip	Race	Income	Location	2012	2013	2014	2015	2016	2012-16
60605	18.6	87668	Southside	8,387	7,678	6,868	7,419	7,023	37,375
60607	16.3	85917	Southside	11,291	11,403	10,876	10,779	10,161	54,510
60608	18.2	36216	Southside	39,590	40,762	38,409	38,814	37,270	194,845
60609	28.9	32284	Southside	32,537	36,072	30,915	34,632	30,369	164,525
60615	62.0	41108	Southside	21,341	24,150	21,524	23,597	21,156	111,768
60616	26.0	42594	Southside	25,603	23,114	22,638	23,422	22,384	117,161
60617	56.2	37796	Southside	36,308	40,218	37,571	37,190	30,469	181,756
60619	97.4	32239	Southside	35,703	39,959	37,700	40,249	32,779	186,390
60620	98.1	32168	Southside	37,293	40,724	38,859	41,680	35,373	193,929
60621	97.9	19832	Southside	18,110	20,090	19,228	20,003	15,712	93,143
60623	33.5	28091	Southside	48,357	53,560	51,005	47,291	43,195	243,408
60628	94.7	36242	Southside	33,451	36,800	36,110	36,186	29,727	172,274
60629	23.0	40712	Southside	53,689	55,169	52,065	52,738	46,691	260,352
60632	2.1	38438	Southside	43,762	44,156	41,562	39,645	38,058	207,183
	1.0	17101		0.510	2.044	2.050			11200

5. Par	king Tickets.	By 25 Sout	hside Zip Co	des (LOCATIO	ON), 2012 to 2016
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6063	33	4.8	47136	Southside	2,710	3,041	3,050	3,141	2,421	14,363
6063	36	96.3	27871	Southside	23,884	24,721	25,245	26,273	21,041	121,164
6063	37	78.6	26845	Southside	25,116	29,401	27,975	27,998	22,663	133,153
6063	38	4.0	62511	Southside	13,153	14,255	12,969	13,429	13,573	67,379
6064	42	11.0	79633	Southside	12,331	12,407	11,786	11,786	11,398	59,708
6064	13	74.5	59593	Southside	20,474	21,905	21,234	22,291	18,103	104,007
6064	19	95.5	26797	Southside	27,592	31,351	28,869	31,168	26,976	145,956
6065	52	45.8	61797	Southside	14,665	15,826	14,657	15,450	13,486	74,084
6065	53	93.8	25923	Southside	17,120	19,208	19,299	19,754	18,375	93,756
6065	55	7.7	87105	Southside	4,763	4,685	4,407	5,095	4,669	23,619

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60827	96.8	31063	Southside	8,190	9,203	9,773	9,330	7,811	44,307
X	х	х	25 Zip Codes	615,420	659,858	624,594	639,360	560,883	3,100,115
x	x	x	Chicago	1,298,474	1,369,086	1,295,933	1,316,825	1,215,796	6,496,114

6. Parking Tickets, By 34 Northside Zip Codes (LOCATION), 2012 to 2016

Zip	Race	Income	Location	2012	2013	2014	2015	2016	2012-16
60601	6.8	102254	Northside	3,374	3,421	2,853	2,913	3,055	15,616
60602	11.1	57368	Northside	811	701	638	605	617	3,372
60603	2.8	122031	Northside	571	656	586	550	564	2,927
60604	7.4	151731	Northside	550	539	578	541	614	2,822
60606	4.3	106661	Northside	1,573	1,575	1,351	1,311	1,254	7,064
60610	18.2	75892	Northside	14,634	14,697	13,308	13,677	13,228	69,544
60611	4.4	87280	Northside	7,737	8,000	7,087	6,533	6,641	35,998
60612	61.7	35888	Northside	20,612	23,468	21,707	21,299	19,684	106,770
60613	7.8	72126	Northside	24,260	23,756	21,646	22,419	23,439	115,520
60614	3.9	92714	Northside	31,270	29,516	27,373	26,047	26,908	141,114
60618	3.5	57500	Northside	47,834	50,205	47,629	49,973	47,955	243,596
60622	8.3	75163	Northside	38,085	38,260	35,317	35,048	34,945	181,655
60624	95.3	22204	Northside	21,979	27,568	26,806	25,678	22,311	124,342
60625	4.7	56507	Northside	38,174	37,935	35,426	37,266	35,831	184,632
60626	25.9	36439	Northside	27,423	27,537	25,037	25,116	23,625	128,738
60630	1.4	62244	Northside	17,931	18,338	18,089	18,432	17,529	90,319
60631	0.5	76400	Northside	5,061	5,291	5,183	5,352	5,662	26,549
60634	1.4	56382	Northside	21,214	21,315	21,733	22,298	22,678	109,238
60639	16.6	38798	Northside	48,598	50,876	49,950	50,690	49,536	249,650
60640	18.1	47631	Northside	31,624	30,692	28,681	30,454	29,696	151,147
60641	2.8	51597	Northside	33,737	34,016	33,373	34,180	34,724	170,030
60644	94.3	26882	Northside	27,287	35,269	34,752	33,048	26,698	157,054
60645	14.9	47633	Northside	20,793	20,789	19,337	20,375	19,553	100,847
60646	0.8	73246	Northside	6,909	7,428	6,764	6,667	6,841	34,609
60647	7.4	56257	Northside	53,854	54,102	52,289	52,196	49,995	262,436
60651	63.7	32006	Northside	36,986	45,153	42,482	40,526	37,662	202,809
60654	7.3	90520	Northside	6,262	6,096	5,613	5,300	5,282	28,553

60656	1.8	57308	Northside	6,545	7,057	6,305	6,534	7,023	33,464
60657	2.8	79638	Northside	29,018	27,429	24,684	25,038	25,855	132,024
60659	8.9	48104	Northside	21,423	21,564	20,836	21,943	21,389	107,155
60660	15.7	41412	Northside	19,820	18,869	17,288	18,130	16,784	90,891
60661	6.9	98882	Northside	2,977	3,000	2,784	2,858	2,623	14,242
60706	0.7	52429	Northside	3,299	3,269	3,076	3,299	3,681	16,624
60707	16.5	54669	Northside	10,829	10,841	10,778	11,169	11,031	54,648
х	x	х	34 Zip Codes	683,054	709,228	671,339	677,465	654,913	3,395,999
x	x	х	Chicago	1,298,474	1,369,086	1,295,933	1,316,825	1,215,796	6,496,114

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60601 6.8 102254 Northside 431 478 371 493 447 2.220 60602 11.1 57368 Northside 138 89 67 85 61 440 60603 2.8 122031 Northside 106 115 71 90 67 449 60604 7.4 151731 Northside 72 62 52 65 66 317 60605 18.6 87668 Southside 1.561 1.371 1.003 1.442 1.147 6.524 60606 4.3 106661 Northside 2.00 222 146 173 169 910 60607 16.3 85917 Southside 2.561 1.562 1.758 1.305 1.794 1.509 7.928 60601 18.2 75892 Northside 2.617 3.742 2.901 3.471 2.738 15.199 60611 4.4 87280 <th>Zip</th> <th>Race</th> <th>Income</th> <th>Location</th> <th>2012</th> <th>2013</th> <th>2014</th> <th>2015</th> <th>2016</th> <th>2012-2016</th>	Zip	Race	Income	Location	2012	2013	2014	2015	2016	2012-2016
60602 11.1 57368 Northside 138 89 67 85 61 440 60603 2.8 122031 Northside 106 115 71 90 67 449 60604 7.4 151731 Northside 72 62 52 65 66 317 60605 18.6 87668 Southside 1.561 1.371 1.003 1.442 1.147 6.524 60606 4.3 106661 Northside 200 222 146 173 169 910 60607 16.3 85917 Southside 2.647 3.742 2.901 3.471 2.738 18.997 60601 18.2 75892 Northside 2.281 2.520 1.836 2.551 2.137 11.328 60611 4.4 87280 Northside 2.351 2.922 2.683 2.781 2.557 13.294 60613 7.8 72126 <t< td=""><td>60601</td><td>6.8</td><td>102254</td><td>Northside</td><td>431</td><td>478</td><td>371</td><td>493</td><td>447</td><td>2,220</td></t<>	60601	6.8	102254	Northside	431	478	371	493	447	2,220
60603 2.8 122031 Northside 106 115 71 90 67 449 60604 7.4 151731 Northside 72 62 52 65 66 317 60605 18.6 87668 Southside 1.561 1.371 1.003 1.442 1.147 6.524 60606 4.3 106661 Northside 200 222 146 173 169 910 60607 16.3 85917 Southside 1.562 1.758 1.305 1.794 1.509 7.928 60609 28.9 32284 Southside 2.647 3.742 2.901 3.471 2.738 15.499 60610 18.2 75892 Northside 2.281 2.520 1.836 2.551 2.137 11.325 60613 7.8 72126 Northside 3.566 3.699 2.960 3.905 3.809 1.739 60615 6.2.0 4110	60602	11.1	57368	Northside	138	89	67	85	61	440
60604 7.4 151731 Northside 72 62 52 65 66 317 60605 18.6 87668 Southside 1,561 1,371 1,003 1,442 1,147 6,524 60606 4.3 106661 Northside 200 222 146 173 169 910 60607 16.3 85917 Southside 3,515 4,242 3,428 4,020 3,752 18,957 60608 18.2 36216 Southside 2,647 3,742 2,901 3,471 2,738 15,499 60610 18.2 75892 Northside 2,281 2,520 1,836 2,551 2,137 11,325 60611 4.4 87280 Northside 2,351 2,922 2,683 2,781 2,557 13,294 60613 7.8 72126 Northside 3,566 3,699 2,960 3,905 3,809 1,7939 60615 62.0	60603	2.8	122031	Northside	106	115	71	90	67	449
60605 18.6 87668 Southside 1.561 1.371 1.003 1.442 1.147 6.524 60606 4.3 106661 Northside 200 222 146 173 169 910 60607 16.3 85917 Southside 1.562 1.758 1.305 1.794 1.509 7.928 60608 18.2 36216 Southside 2.647 3.742 2.901 3.471 2.738 15.499 60610 18.2 75892 Northside 2.281 2.520 1.836 2.551 2.137 11.325 60611 4.4 87280 Northside 2.351 2.922 2.683 2.781 2.557 13.294 60613 7.8 72126 Northside 3.566 3.699 2.960 3.905 3.809 17.939 60615 62.0 41108 Southside 2.851 3.694 3.081 3.814 3.346 16.786 60616	60604	7.4	151731	Northside	72	62	52	65	66	317
60606 4.3 106661 Northside 200 222 146 173 169 910 60607 16.3 85917 Southside 1.562 1.758 1.305 1.794 1.509 7,928 60608 18.2 36216 Southside 2.647 3.742 2.901 3.471 2.738 15,499 60610 18.2 75892 Northside 2.647 3.742 2.901 3.471 2.738 15,499 60611 4.4 87280 Northside 2.281 2.520 1.836 2.551 2.137 11.325 60612 61.7 35888 Northside 2.351 2.922 2.663 2.781 2.557 13.294 60613 7.8 72126 Northside 3.566 3.699 2.960 3.905 3.809 17.939 60614 3.9 92714 Northside 2.851 3.694 3.081 3.814 3.346 16.786 60616	60605	18.6	87668	Southside	1,561	1,371	1,003	1,442	1,147	6,524
60607 16.3 85917 Southside 1.562 1.758 1.305 1.794 1.509 7.928 60608 18.2 36216 Southside 3,515 4,242 3,428 4,020 3,752 18,957 60609 28.9 32284 Southside 2,647 3,742 2,901 3,471 2,738 15,499 60610 18.2 75892 Northside 2,281 2,520 1,836 2,551 2,137 11,325 60611 4.4 87280 Northside 2,351 2,922 2,683 2,781 2,557 13,294 60613 7.8 72126 Northside 3,566 3,699 2,960 3,905 3,809 17,939 60614 3.9 92714 Northside 2,851 3,694 3,081 3,814 3,346 16,786 60616 26.0 42594 Southside 5,237 3,880 3,174 4,286 3,518 20,095 606	60606	4.3	106661	Northside	200	222	146	173	169	910
60608 18.2 36216 Southside 3,515 4,242 3,428 4,020 3,752 18,957 60609 28.9 32284 Southside 2,647 3,742 2,901 3,471 2,738 15,499 60610 18.2 75892 Northside 1,168 1,193 955 1,116 1,083 5,515 60611 4.4 87280 Northside 2,351 2,922 2,683 2,781 2,557 13,294 60613 7.8 72126 Northside 3,566 3,699 2,960 3,905 3,809 17,939 60614 3.9 92714 Northside 2,851 3,694 3,081 3,814 3,346 16,786 60616 62.0 41108 Southside 5,237 3,880 3,174 4,286 3,518 20.095 60617 56.2 37796 Southside 4,347 5,230 4,740 5,191 4,029 23,537 60619	60607	16.3	85917	Southside	1,562	1,758	1,305	1,794	1,509	7,928
60609 28.9 32284 Southside 2,647 3,742 2,901 3,471 2,738 15,499 60610 18.2 75892 Northside 2,281 2,520 1.836 2,551 2,137 11,325 60611 4.4 87280 Northside 1,168 1,193 955 1,116 1,083 5,515 60612 61.7 35888 Northside 2,351 2,922 2,683 2,781 2,557 13,294 60613 7.8 72126 Northside 3,566 3,699 2,960 3,905 3,809 17,939 60614 3.9 92714 Northside 2,851 3,694 3,081 3,814 3,346 16,786 60616 62.0 41108 Southside 5,237 3,880 3,174 4,286 3,518 20,095 60617 56.2 37796 Southside 4,347 5,230 4,740 5,191 4,029 23,537 60618	60608	18.2	36216	Southside	3,515	4,242	3,428	4,020	3,752	18,957
60610 18.2 75892 Northside 2,281 2,520 1,836 2,551 2,137 11,325 60611 4.4 87280 Northside 1,168 1,193 955 1,116 1,083 5,515 60612 61.7 35888 Northside 2,351 2,922 2,683 2,781 2,557 13,294 60613 7.8 72126 Northside 3,566 3,699 2,960 3,905 3,809 17,939 60614 3.9 92714 Northside 4,741 4,959 3,840 4,693 4,290 22,523 60615 62.0 41108 Southside 2,851 3,694 3,081 3,814 3,346 16,786 60616 26.0 42594 Southside 5,237 3,880 3,174 4,286 3,518 20,095 60618 3.5 57500 Northside 4,347 5,230 4,740 5,191 4,605 26,006 60621<	60609	28.9	32284	Southside	2,647	3,742	2,901	3,471	2,738	15,499
60611 4.4 87280 Northside 1,168 1,193 955 1,116 1,083 5,515 60612 61.7 35888 Northside 2,351 2,922 2,683 2,781 2,557 13,294 60613 7.8 72126 Northside 3,566 3,699 2,960 3,905 3,809 17,939 60614 3.9 92714 Northside 4,741 4,959 3,840 4,693 4,290 22,523 60615 62.0 41108 Southside 2,851 3,694 3,081 3,814 3,346 16,786 60616 26.0 42594 Southside 5,237 3,880 3,174 4,286 3,518 20,095 60617 56.2 37796 Southside 4,347 5,230 4,740 5,191 4,029 23,537 60619 97.4 32239 Southside 4,557 5,690 5,053 6,101 4,605 26,006 60620	60610	18.2	75892	Northside	2,281	2,520	1,836	2,551	2,137	11,325
60612 61.7 35888 Northside 2,351 2,922 2,683 2,781 2,557 13,294 60613 7.8 72126 Northside 3,566 3,699 2,960 3,905 3,809 17,939 60614 3.9 92714 Northside 4,741 4,959 3,840 4,693 4,290 22,523 60615 62.0 41108 Southside 2,851 3,694 3,081 3,814 3,346 16,786 60616 26.0 42594 Southside 5,237 3,880 3,174 4,286 3,518 20,095 60617 56.2 37796 Southside 4,347 5,230 4,740 5,191 4,029 23,537 60618 3.5 57500 Northside 4,557 5,690 5,053 6,101 4,605 26,006 60620 98.1 32168 Southside 1,698 2,192 2,055 2,170 1,831 9,946 606	60611	4.4	87280	Northside	1,168	1,193	955	1,116	1,083	5,515
60613 7.8 72126 Northside 3,566 3,699 2,960 3,905 3,809 17,939 60614 3.9 92714 Northside 4,741 4,959 3,840 4,693 4,290 22,523 60615 62.0 41108 Southside 2,851 3,694 3,081 3,814 3,346 16,786 60616 26.0 42594 Southside 5,237 3,880 3,174 4,286 3,518 20,095 60617 56.2 37796 Southside 4,347 5,230 4,740 5,191 4,029 23,537 60618 3.5 57500 Northside 5,688 6,725 5,671 7,090 6,518 31,692 60619 97.4 32239 Southside 4,434 5,809 5,046 5,924 4,783 25,996 60621 97.9 19832 Southside 1,698 2,192 2,055 2,170 1,831 9,946 606	60612	61.7	35888	Northside	2,351	2,922	2,683	2,781	2,557	13,294
60614 3.9 92714 Northside 4,741 4,959 3,840 4,693 4,290 22,523 60615 62.0 41108 Southside 2,851 3,694 3,081 3,814 3,346 16,786 60616 26.0 42594 Southside 5,237 3,880 3,174 4,286 3,518 20,095 60617 56.2 37796 Southside 4,347 5,230 4,740 5,191 4,029 23,537 60618 3.5 57500 Northside 5,688 6,725 5,671 7,090 6,518 31,692 60619 97.4 32239 Southside 4,434 5,809 5,046 5,924 4,783 25,996 60620 98.1 32168 Southside 1,698 2,192 2,055 2,170 1,831 9,946 60622 8.3 75163 Northside 1,698 3,962 3,303 3,998 3,016 17,087 606	60613	7.8	72126	Northside	3,566	3,699	2,960	3,905	3,809	17,939
60615 62.0 41108 Southside 2.851 3.694 3.081 3.814 3.346 16.786 60616 26.0 42594 Southside 5,237 3.880 3.174 4.286 3.518 20,095 60617 56.2 37796 Southside 4.347 5.230 4.740 5.191 4.029 23,537 60618 3.5 57500 Northside 5.688 6.725 5.671 7,090 6.518 31,692 60619 97.4 32239 Southside 4,557 5.690 5,053 6,101 4,605 26,006 60620 98.1 32168 Southside 1.698 2,192 2.055 2,170 1.831 9,946 60621 97.9 19832 Southside 1.698 2,192 2.055 2,170 1.831 9,946 60623 33.5 28091 Southside 2,808 3,962 3,303 3,998 3,016 17,087 60	60614	3.9	92714	Northside	4,741	4,959	3,840	4,693	4,290	22,523
60616 26.0 42594 Southside 5,237 3,880 3,174 4,286 3,518 20,095 60617 56.2 37796 Southside 4,347 5,230 4,740 5,191 4,029 23,537 60618 3.5 57500 Northside 5,688 6,725 5,671 7,090 6,518 31,692 60619 97.4 32239 Southside 4,557 5,690 5,053 6,101 4,605 26,006 60620 98.1 32168 Southside 4,434 5,809 5,046 5,924 4,783 25,996 60621 97.9 19832 Southside 1,698 2,192 2,055 2,170 1,831 9,946 60622 8.3 75163 Northside 2,808 3,962 3,303 3,998 3,016 17,087 60624 95.3 2204 Northside 1,780 2,574 2,509 2,823 2,433 12,119 606	60615	62.0	41108	Southside	2,851	3,694	3,081	3,814	3,346	16,786
60617 56.2 37796 Southside 4,347 5,230 4,740 5,191 4,029 23,537 60618 3.5 57500 Northside 5,688 6,725 5,671 7,090 6,518 31,692 60619 97.4 32239 Southside 4,434 5,809 5,046 5,924 4,783 25,996 60620 98.1 32168 Southside 1,698 2,192 2,055 2,170 1,831 9,946 60622 8.3 75163 Northside 4,264 4,544 3,680 4,649 4,243 21,380 60623 33.5 28091 Southside 1,780 2,574 2,509 2,823 2,433 12,119 60624 95.3 22204 Northside 1,780 2,574 2,509 2,823 2,433 12,119 60626 25.9 36439 Northside 5,097 5,154 4,370 5,376 4,927 24,924 60	60616	26.0	42594	Southside	5,237	3,880	3,174	4,286	3,518	20,095
60618 3.5 57500 Northside 5,688 6,725 5,671 7,090 6,518 31,692 60619 97.4 32239 Southside 4,557 5,690 5,053 6,101 4,605 26,006 60620 98.1 32168 Southside 4,434 5,809 5,046 5,924 4,783 25,996 60621 97.9 19832 Southside 1,698 2,192 2,055 2,170 1,831 9,946 60622 8.3 75163 Northside 4,264 4,544 3,680 4,649 4,243 21,380 60623 33.5 28091 Southside 2,808 3,962 3,303 3,998 3,016 17,087 60624 95.3 22204 Northside 1,780 2,574 2,509 2,823 2,433 12,119 60626 25.9 36439 Northside 4,305 4,431 3,413 4,044 20,534 60628 94	60617	56.2	37796	Southside	4,347	5,230	4,740	5,191	4,029	23,537
6061997.432239Southside4,5575,6905,0536,1014,60526,0066062098.132168Southside4,4345,8095,0465,9244,78325,9966062197.919832Southside1,6982,1922,0552,1701,8319,946606228.375163Northside4,2644,5443,6804,6494,24321,3806062333.528091Southside2,8083,9623,3033,9983,01617,0876062495.322204Northside1,7802,5742,5092,8232,43312,119606254.756507Northside5,0975,1544,3705,3764,92724,9246062625.936439Northside3,7494,7014,4855,0754,04422,0546062923.040712Southside3,9634,9933,9085,0113,96521,840606301.462244Northside2,6822,6552,4342,9262,71413,411606310.576400Northside8879156989818714,352606322.138438Southside2,5132,9452,3053,0442,53613,343	60618	3.5	57500	Northside	5,688	6,725	5,671	7,090	6,518	31,692
6062098.132168Southside4,4345,8095,0465,9244,78325,9966062197.919832Southside1,6982,1922,0552,1701,8319,946606228.375163Northside4,2644,5443,6804,6494,24321,3806062333.528091Southside2,8083,9623,3033,9983,01617,0876062495.322204Northside1,7802,5742,5092,8232,43312,119606254.756507Northside5,0975,1544,3705,3764,92724,9246062625.936439Northside3,7494,7014,4855,0754,04420,5346062923.040712Southside3,9634,9933,9085,0113,96521,840606301.462244Northside2,6822,6552,4342,9262,71413,411606310.576400Northside8879156989818714,352606322.138438Southside2,5132,9452,3053,0442,53613,343	60619	97.4	32239	Southside	4,557	5,690	5,053	6,101	4,605	26,006
6062197.919832Southside1,6982,1922,0552,1701,8319,946606228.375163Northside4,2644,5443,6804,6494,24321,3806062333.528091Southside2,8083,9623,3033,9983,01617,0876062495.322204Northside1,7802,5742,5092,8232,43312,119606254.756507Northside5,0975,1544,3705,3764,92724,9246062625.936439Northside4,3054,4313,4134,3414,04420,5346062894.736242Southside3,7494,7014,4855,0754,04422,0546062923.040712Southside2,6822,6552,4342,9262,71413,411606301.462244Northside2,6822,6552,4342,9262,71413,411606310.576400Northside8879156989818714,352606322.138438Southside2,5132,9452,3053,0442,53613,343	60620	98.1	32168	Southside	4,434	5,809	5,046	5,924	4,783	25,996
606228.375163Northside4,2644,5443,6804,6494,24321,3806062333.528091Southside2,8083,9623,3033,9983,01617,0876062495.322204Northside1,7802,5742,5092,8232,43312,119606254.756507Northside5,0975,1544,3705,3764,92724,9246062625.936439Northside4,3054,4313,4134,3414,04420,5346062894.736242Southside3,7494,7014,4855,0754,04422,0546062923.040712Southside3,9634,9933,9085,0113,96521,840606310.576400Northside2,6822,6552,4342,9262,71413,411606322.138438Southside2,5132,9452,3053,0442,53613,343	60621	97.9	19832	Southside	1,698	2,192	2,055	2,170	1,831	9,946
6062333.528091Southside2,8083,9623,3033,9983,01617,0876062495.322204Northside1,7802,5742,5092,8232,43312,119606254.756507Northside5,0975,1544,3705,3764,92724,9246062625.936439Northside4,3054,4313,4134,3414,04420,5346062894.736242Southside3,7494,7014,4855,0754,04422,0546062923.040712Southside3,9634,9933,9085,0113,96521,840606301.462244Northside2,6822,6552,4342,9262,71413,411606310.576400Northside8879156989818714,352606322.138438Southside2,5132,9452,3053,0442,53613,343	60622	8.3	75163	Northside	4,264	4,544	3,680	4,649	4,243	21,380
6062495.322204Northside1,7802,5742,5092,8232,43312,119606254.756507Northside5,0975,1544,3705,3764,92724,9246062625.936439Northside4,3054,4313,4134,3414,04420,5346062894.736242Southside3,7494,7014,4855,0754,04422,0546062923.040712Southside3,9634,9933,9085,0113,96521,840606301.462244Northside2,6822,6552,4342,9262,71413,411606310.576400Northside8879156989818714,352606322.138438Southside2,5132,9452,3053,0442,53613,343	60623	33.5	28091	Southside	2,808	3,962	3,303	3,998	3,016	17,087
60625 4.7 56507 Northside 5,097 5,154 4,370 5,376 4,927 24,924 60626 25.9 36439 Northside 4,305 4,431 3,413 4,341 4,044 20,534 60628 94.7 36242 Southside 3,749 4,701 4,485 5,075 4,044 22,054 60629 23.0 40712 Southside 3,963 4,993 3,908 5,011 3,965 21,840 60630 1.4 62244 Northside 2,682 2,655 2,434 2,926 2,714 13,411 60631 0.5 76400 Northside 887 915 698 981 871 4,352 60632 2.1 38438 Southside 2,513 2,945 2,305 3,044 2,536 13,343	60624	95.3	22204	Northside	1,780	2,574	2,509	2,823	2,433	12,119
60626 25.9 36439 Northside 4,305 4,431 3,413 4,341 4,044 20,534 60628 94.7 36242 Southside 3,749 4,701 4,485 5,075 4,044 22,054 60629 23.0 40712 Southside 3,963 4,993 3,908 5,011 3,965 21,840 60630 1.4 62244 Northside 2,682 2,655 2,434 2,926 2,714 13,411 60631 0.5 76400 Northside 887 915 698 981 871 4,352 60632 2.1 38438 Southside 2,513 2,945 2,305 3,044 2,536 13,343	60625	4.7	56507	Northside	5,097	5,154	4,370	5,376	4,927	24,924
60628 94.7 36242 Southside 3,749 4,701 4,485 5,075 4,044 22,054 60629 23.0 40712 Southside 3,963 4,993 3,908 5,011 3,965 21,840 60630 1.4 62244 Northside 2,682 2,655 2,434 2,926 2,714 13,411 60631 0.5 76400 Northside 887 915 698 981 871 4,352 60632 2.1 38438 Southside 2,513 2.945 2.305 3,044 2,536 13,343	60626	25.9	36439	Northside	4,305	4,431	3,413	4,341	4,044	20,534
60629 23.0 40712 Southside 3,963 4,993 3,908 5,011 3,965 21,840 60630 1.4 62244 Northside 2,682 2,655 2,434 2,926 2,714 13,411 60631 0.5 76400 Northside 887 915 698 981 871 4,352 60632 2.1 38438 Southside 2,513 2.945 2.305 3.044 2.536 13.343	60628	94.7	36242	Southside	3,749	4,701	4,485	5,075	4,044	22,054
60630 1.4 62244 Northside 2,682 2,655 2,434 2,926 2,714 13,411 60631 0.5 76400 Northside 887 915 698 981 871 4,352 60632 2.1 38438 Southside 2.513 2.945 2.305 3.044 2.536 13.343	60629	23.0	40712	Southside	3,963	4,993	3,908	5,011	3,965	21,840
60631 0.5 76400 Northside 887 915 698 981 871 4,352 60632 2.1 38438 Southside 2.513 2.945 2.305 3.044 2.536 13.343	60630	1.4	62244	Northside	2,682	2,655	2,434	2,926	2,714	13,411
60632 2.1 38438 Southside 2.513 2.945 2.305 3.044 2.536 13.343	60631	0.5	76400	Northside	887	915	698	981	871	4,352
	60632	2.1	38438	Southside	2,513	2,945	2,305	3,044	2,536	13,343

B. Parking Ticket Appeals, By All 59 City of Chicago Zip Codes, Fiscal Years 2012 to 2016

60633	4.8	47136	Southside	416	491	436	481	375	2,199
60634	1.4	56382	Northside	2,658	2,736	2,448	3,100	2,732	13,674
60636	96.3	27871	Southside	2,300	2,632	2,495	3,044	2,267	12,738
60637	78.6	26845	Southside	2,921	3,715	3,571	4,079	3,106	17,392
60638	4.0	62511	Southside	1,832	2,006	1,350	1,962	1,640	8,790
60639	16.6	38798	Northside	3,696	4,766	4,235	4,817	4,288	21,802
60640	18.1	47631	Northside	4,898	4,938	4,092	5,445	5,150	24,523
60641	2.8	51597	Northside	4,078	4,234	3,732	4,355	4,487	20,886
60642	11.0	79633	Southside	1,612	1,750	1,312	1,764	1,420	7,858
60643	74.5	59593	Southside	2,599	3,190	2,700	3,150	2,462	14,101
60644	94.3	26882	Northside	2,413	4,149	4,011	4,261	3,118	17,952
60645	14.9	47633	Northside	3,728	3,772	3,237	3,757	3,629	18,123
60646	0.8	73246	Northside	1,157	1,233	929	1,074	1,148	5,541
60647	7.4	56257	Northside	5,672	6,115	5,205	6,234	5,469	28,695
60649	95.5	26797	Southside	3,304	4,166	3,726	4,489	3,512	19,197
60651	63.7	32006	Northside	3,061	4,912	4,189	4,718	4,011	20,891
60652	45.8	61797	Southside	1,671	2,021	1,612	1,954	1,669	8,927
60653	93.8	25923	Southside	2,012	2,535	2,400	2,826	2,470	12,243
60654	7.3	90520	Northside	944	911	711	860	740	4,166
60655	7.7	87105	Southside	673	791	627	809	657	3,557
60656	1.8	57308	Northside	1,349	1,521	1,225	1,358	1,414	6,867
60657	2.8	79638	Northside	4,260	4,346	3,259	4,437	3,949	20,251
60659	8.9	48104	Northside	4,309	4,047	3,635	4,300	4,543	20,834
60660	15.7	41412	Northside	3,587	3,369	2,717	3,276	3,080	16,029
60661	6.9	98882	Northside	463	492	344	463	357	2,119
60706	0.7	52429	Northside	509	483	416	494	662	2,564
60707	16.5	54669	Northside	1,316	1,527	1,203	1,625	1,514	7,185
60827	96.8	31063	Southside	933	1,098	1,129	1,169	911	5,240
X	x	X	Chicago	153,570	175,412	148,489	179,780	156,035	813,286
	•	1	1						

1. Parking Ticket Appeals, By 16 Majority-Black Zip Codes (RACE), 2012 to 2016

Zip	Race	Income	Location	2012	2013	2014	2015	2016	2012-2016
60612	61.7	35888	Northside	2,351	2,922	2,683	2,781	2,557	13,294

60615	62.0	41108	Southside	2,851	3,694	3,081	3,814	3,346	16,786
60617	56.2	37796	Southside	4,347	5,230	4,740	5,191	4,029	23,537
60619	97.4	32239	Southside	4,557	5,690	5,053	6,101	4,605	26,006
60620	98.1	32168	Southside	4,434	5,809	5,046	5,924	4,783	25,996
60621	97.9	19832	Southside	1,698	2,192	2,055	2,170	1,831	9,946
60624	95.3	22204	Northside	1,780	2,574	2,509	2,823	2,433	12,119
60628	94.7	36242	Southside	3,749	4,701	4,485	5,075	4,044	22,054
60636	96.3	27871	Southside	2,300	2,632	2,495	3,044	2,267	12,738
60637	78.6	26845	Southside	2,921	3,715	3,571	4,079	3,106	17,392
60643	74.5	59593	Southside	2,599	3,190	2,700	3,150	2,462	14,101
60644	94.3	26882	Northside	2,413	4,149	4,011	4,261	3,118	17,952
60649	95.5	26797	Southside	3,304	4,166	3,726	4,489	3,512	19,197
60651	63.7	32006	Northside	3,061	4,912	4,189	4,718	4,011	20,891
60653	93.8	25923	Southside	2,012	2,535	2,400	2,826	2,470	12,243
60827	96.8	31063	Southside	933	1,098	1,129	1,169	911	5,240
x	х	х	16 Zip Codes	45,310	59,209	53,873	61,615	49,485	269,492
х	х	Х	Chicago	153,570	175,412	148,489	179,780	156,035	813,286

2. Parking Ticket Appeals, By 43 Majority-Other Zip Codes (RACE), 2012 to 2016

Zip	Race	Income	Location	2012	2013	2014	2015	2016	2012-2016
60601	6.8	102254	Northside	431	478	371	493	447	2,220
60602	11.1	57368	Northside	138	89	67	85	61	440
60603	2.8	122031	Northside	106	115	71	90	67	449
60604	7.4	151731	Northside	72	62	52	65	66	317
60605	18.6	87668	Southside	1,561	1,371	1,003	1,442	1,147	6,524
60606	4.3	106661	Northside	200	222	146	173	169	910
60607	16.3	85917	Southside	1,562	1,758	1,305	1,794	1,509	7,928
60608	18.2	36216	Southside	3,515	4,242	3,428	4,020	3,752	18,957
60609	28.9	32284	Southside	2,647	3,742	2,901	3,471	2,738	15,499
60610	18.2	75892	Northside	2,281	2,520	1,836	2,551	2,137	11,325
60611	4.4	87280	Northside	1,168	1,193	955	1,116	1,083	5,515
60613	7.8	72126	Northside	3,566	3,699	2,960	3,905	3,809	17,939
60614	3.9	92714	Northside	4,741	4,959	3,840	4,693	4,290	22,523

60616	26.0	42594	Southside	5,237	3,880	3,174	4,286	3,518	20,095
60618	3.5	57500	Northside	5,688	6,725	5,671	7,090	6,518	31,692
60622	8.3	75163	Northside	4,264	4,544	3,680	4,649	4,243	21,380
60623	33.5	28091	Southside	2,808	3,962	3,303	3,998	3,016	17,087
60625	4.7	56507	Northside	5,097	5,154	4,370	5,376	4,927	24,924
60626	25.9	36439	Northside	4,305	4,431	3,413	4,341	4,044	20,534
60629	23.0	40712	Southside	3,963	4,993	3,908	5,011	3,965	21,840
60630	1.4	62244	Northside	2,682	2,655	2,434	2,926	2,714	13,411
60631	0.5	76400	Northside	887	915	698	981	871	4,352
60632	2.1	38438	Southside	2,513	2,945	2,305	3,044	2,536	13,343
60633	4.8	47136	Southside	416	491	436	481	375	2,199
60634	1.4	56382	Northside	2,658	2,736	2,448	3,100	2,732	13,674
60638	4.0	62511	Southside	1,832	2,006	1,350	1,962	1,640	8,790
60639	16.6	38798	Northside	3,696	4,766	4,235	4,817	4,288	21,802
60640	18.1	47631	Northside	4,898	4,938	4,092	5,445	5,150	24,523
60641	2.8	51597	Northside	4,078	4,234	3,732	4,355	4,487	20,886
60642	11.0	79633	Southside	1,612	1,750	1,312	1,764	1,420	7,858
60645	14.9	47633	Northside	3,728	3,772	3,237	3,757	3,629	18,123
60646	0.8	73246	Northside	1,157	1,233	929	1,074	1,148	5,541
60647	7.4	56257	Northside	5,672	6,115	5,205	6,234	5,469	28,695
60652	45.8	61797	Southside	1,671	2,021	1,612	1,954	1,669	8,927
60654	7.3	90520	Northside	944	911	711	860	740	4,166
60655	7.7	87105	Southside	673	791	627	809	657	3,557
60656	1.8	57308	Northside	1,349	1,521	1,225	1,358	1,414	6,867
60657	2.8	79638	Northside	4,260	4,346	3,259	4,437	3,949	20,251
60659	8.9	48104	Northside	4,309	4,047	3,635	4,300	4,543	20,834
60660	15.7	41412	Northside	3,587	3,369	2,717	3,276	3,080	16,029
60661	6.9	98882	Northside	463	492	344	463	357	2,119
60706	0.7	52429	Northside	509	483	416	494	662	2,564
60707	16.5	54669	Northside	1,316	1,527	1,203	1,625	1,514	7,185
X	х	x	43 Zip Codes	108,260	116,203	94,616	118,165	106,550	543,794
x	x	x	Chicago	153,570	175,412	148,489	179,780	156,035	813,286

Zip	Race	Income	Location	2012	2013	2014	2015	2016	2012-2016
60608	18.2	36216	Southside	3,515	4,242	3,428	4,020	3,752	18,957
60609	28.9	32284	Southside	2,647	3,742	2,901	3,471	2,738	15,499
60612	61.7	35888	Northside	2,351	2,922	2,683	2,781	2,557	13,294
60615	62.0	41108	Southside	2,851	3,694	3,081	3,814	3,346	16,786
60616	26.0	42594	Southside	5,237	3,880	3,174	4,286	3,518	20,095
60617	56.2	37796	Southside	4,347	5,230	4,740	5,191	4,029	23,537
60619	97.4	32239	Southside	4,557	5,690	5,053	6,101	4,605	26,006
60620	98.1	32168	Southside	4,434	5,809	5,046	5,924	4,783	25,996
60621	97.9	19832	Southside	1,698	2,192	2,055	2,170	1,831	9,946
60623	33.5	28091	Southside	2,808	3,962	3,303	3,998	3,016	17,087
60624	95.3	22204	Northside	1,780	2,574	2,509	2,823	2,433	12,119
60626	25.9	36439	Northside	4,305	4,431	3,413	4,341	4,044	20,534
60628	94.7	36242	Southside	3,749	4,701	4,485	5,075	4,044	22,054
60629	23.0	40712	Southside	3,963	4,993	3,908	5,011	3,965	21,840
60632	2.1	38438	Southside	2,513	2,945	2,305	3,044	2,536	13,343
60633	4.8	47136	Southside	416	491	436	481	375	2,199
60636	96.3	27871	Southside	2,300	2,632	2,495	3,044	2,267	12,738
60637	78.6	26845	Southside	2,921	3,715	3,571	4,079	3,106	17,392
60639	16.6	38798	Northside	3,696	4,766	4,235	4,817	4,288	21,802
60640	18.1	47631	Northside	4,898	4,938	4,092	5,445	5,150	24,523
60644	94.3	26882	Northside	2,413	4,149	4,011	4,261	3,118	17,952
60645	14.9	47633	Northside	3,728	3,772	3,237	3,757	3,629	18,123
60649	95.5	26797	Southside	3,304	4,166	3,726	4,489	3,512	19,197
60651	63.7	32006	Northside	3,061	4,912	4,189	4,718	4,011	20,891
60653	93.8	25923	Southside	2,012	2,535	2,400	2,826	2,470	12,243
60659	8.9	48104	Northside	4,309	4,047	3,635	4,300	4,543	20,834
60660	15.7	41412	Northside	3,587	3,369	2,717	3,276	3,080	16,029
60827	96.8	31063	Southside	933	1,098	1,129	1,169	911	5,240
Х	х	х	28 Zip Codes	88,333	105,597	91,957	108,712	91,657	486,256
Х	Х	Х	Chicago	153,570	175,412	148,489	179,780	156,035	813,286

3. Parking Ticket Appeals, By 28 Lower-Income Zip Codes (INCOME), 2012 to 2016

		4. Parki	ng Ticket Appeals	Ticket Appeals, By 31 Higher-Income Zip Codes (INCOME), 2012 to 2016						
					Ĩ	× ,,				
Zip	Race	Income	Location	2012	2013	2014	2015	2016	2012-2016	
60601	6.8	102254	Northside	431	478	371	493	447	2,220	
60602	11.1	57368	Northside	138	89	67	85	61	440	
60603	2.8	122031	Northside	106	115	71	90	67	449	
60604	7.4	151731	Northside	72	62	52	65	66	317	
60605	18.6	87668	Southside	1,561	1,371	1,003	1,442	1,147	6,524	
60606	4.3	106661	Northside	200	222	146	173	169	910	
60607	16.3	85917	Southside	1,562	1,758	1,305	1,794	1,509	7,928	
60610	18.2	75892	Northside	2,281	2,520	1,836	2,551	2,137	11,325	
60611	4.4	87280	Northside	1,168	1,193	955	1,116	1,083	5,515	

3,699

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416

60707	16.5	54669	Northside	1,316	1,527	1,203	1,625	1,514	7,185
Х	х	х	31 Zip Codes	65,237	69,815	56,532	71068.0	64,378	327,030
Х	Х	Х	Chicago	153,570	175,412	148,489	179,780	156,035	813,286

5. Parking Ticket Appeals, By 25 Southside Zip Codes (LOCATION), 2012 to 2016

Zip	Race	Income	Location	2012	2013	2014	2015	2016	2012-16
60605	18.6	87668	Southside	1,561	1,371	1,003	1,442	1,147	6,524
60607	16.3	85917	Southside	1,562	1,758	1,305	1,794	1,509	7,928
60608	18.2	36216	Southside	3,515	4,242	3,428	4,020	3,752	18,957
60609	28.9	32284	Southside	2,647	3,742	2,901	3,471	2,738	15,499
60615	62.0	41108	Southside	2,851	3,694	3,081	3,814	3,346	16,786
60616	26.0	42594	Southside	5,237	3,880	3,174	4,286	3,518	20,095
60617	56.2	37796	Southside	4,347	5,230	4,740	5,191	4,029	23,537
60619	97.4	32239	Southside	4,557	5,690	5,053	6,101	4,605	26,006
60620	98.1	32168	Southside	4,434	5,809	5,046	5,924	4,783	25,996
60621	97.9	19832	Southside	1,698	2,192	2,055	2,170	1,831	9,946
60623	33.5	28091	Southside	2,808	3,962	3,303	3,998	3,016	17,087
60628	94.7	36242	Southside	3,749	4,701	4,485	5,075	4,044	22,054
60629	23.0	40712	Southside	3,963	4,993	3,908	5,011	3,965	21,840
60632	2.1	38438	Southside	2,513	2,945	2,305	3,044	2,536	13,343
60633	4.8	47136	Southside	416	491	436	481	375	2,199
60636	96.3	27871	Southside	2,300	2,632	2,495	3,044	2,267	12,738
60637	78.6	26845	Southside	2,921	3,715	3,571	4,079	3,106	17,392
60638	4.0	62511	Southside	1,832	2,006	1,350	1,962	1,640	8,790
60642	11.0	79633	Southside	1,612	1,750	1,312	1,764	1,420	7,858
60643	74.5	59593	Southside	2,599	3,190	2,700	3,150	2,462	14,101
60649	95.5	26797	Southside	3,304	4,166	3,726	4,489	3,512	19,197
60652	45.8	61797	Southside	1,671	2,021	1,612	1,954	1,669	8,927
60653	93.8	25923	Southside	2,012	2,535	2,400	2,826	2,470	12,243
60655	7.7	87105	Southside	673	791	627	809	657	3,557
60827	96.8	31063	Southside	933	1,098	1,129	1,169	911	5,240
х	х	x	25 Zip Codes	65,715	78,604	67,145	81068	65,308	357,840
X	x	X	Chicago	153,570	175,412	148,489	179,780	156,035	813,286

6.	Parking Ticket Appeals, By 34 Northside Zip Codes (LOCATION), 2012 to 2016

Zip	Race	Income	Location	2012	2013	2014	2015	2016	2012-16
60601	6.8	102254	Northside	431	478	371	493	447	2,220
60602	11.1	57368	Northside	138	89	67	85	61	440
60603	2.8	122031	Northside	106	115	71	90	67	449
60604	7.4	151731	Northside	72	62	52	65	66	317
60606	4.3	106661	Northside	200	222	146	173	169	910
60610	18.2	75892	Northside	2,281	2,520	1,836	2,551	2,137	11,325
60611	4.4	87280	Northside	1,168	1,193	955	1,116	1,083	5,515
60612	61.7	35888	Northside	2,351	2,922	2,683	2,781	2,557	13,294
60613	7.8	72126	Northside	3,566	3,699	2,960	3,905	3,809	17,939
60614	3.9	92714	Northside	4,741	4,959	3,840	4,693	4,290	22,523
60618	3.5	57500	Northside	5,688	6,725	5,671	7,090	6,518	31,692
60622	8.3	75163	Northside	4,264	4,544	3,680	4,649	4,243	21,380
60624	95.3	22204	Northside	1,780	2,574	2,509	2,823	2,433	12,119
60625	4.7	56507	Northside	5,097	5,154	4,370	5,376	4,927	24,924
60626	25.9	36439	Northside	4,305	4,431	3,413	4,341	4,044	20,534
60630	1.4	62244	Northside	2,682	2,655	2,434	2,926	2,714	13,411
60631	0.5	76400	Northside	887	915	698	981	871	4,352
60634	1.4	56382	Northside	2,658	2,736	2,448	3,100	2,732	13,674
60639	16.6	38798	Northside	3,696	4,766	4,235	4,817	4,288	21,802
60640	18.1	47631	Northside	4,898	4,938	4,092	5,445	5,150	24,523
60641	2.8	51597	Northside	4,078	4,234	3,732	4,355	4,487	20,886
60644	94.3	26882	Northside	2,413	4,149	4,011	4,261	3,118	17,952
60645	14.9	47633	Northside	3,728	3,772	3,237	3,757	3,629	18,123
60646	0.8	73246	Northside	1,157	1,233	929	1,074	1,148	5,541
60647	7.4	56257	Northside	5,672	6,115	5,205	6,234	5,469	28,695
60651	63.7	32006	Northside	3,061	4,912	4,189	4,718	4,011	20,891
60654	7.3	90520	Northside	944	911	711	860	740	4,166
60656	1.8	57308	Northside	1,349	1,521	1,225	1,358	1,414	6,867
60657	2.8	79638	Northside	4,260	4,346	3,259	4,437	3,949	20,251
60659	8.9	48104	Northside	4,309	4,047	3,635	4,300	4,543	20,834

60660	15.7	41412	Northside	3,587	3,369	2,717	3,276	3,080	16,029
60661	6.9	98882	Northside	463	492	344	463	357	2,119
60706	0.7	52429	Northside	509	483	416	494	662	2,564
60707	16.5	54669	Northside	1,316	1,527	1,203	1,625	1,514	7,185
x	х	х	34 Zip Codes	87,855	96,808	81,344	98,712	90,727	455,446
х	х	х	Chicago	153,570	175,412	148,489	179,780	156,035	813,286

Zip	Race	Income	Location	2012	2013	2014	2015	2016	2012-16
60601	6.8	102254	Northside	250	274	221	300	275	1,320
60602	11.1	57368	Northside	94	52	45	48	39	278
60603	2.8	122031	Northside	77	84	51	53	42	307
60604	7.4	151731	Northside	28	38	32	42	35	175
60605	18.6	87668	Southside	853	742	595	918	669	3,777
60606	4.3	106661	Northside	117	133	93	89	92	524
60607	16.3	85917	Southside	824	948	772	1,118	874	4,536
60608	18.2	36216	Southside	2,070	2,519	2,105	2,546	2,290	11,530
60609	28.9	32284	Southside	1,645	2,407	1,929	2,298	1,721	10,000
60610	18.2	75892	Northside	1,287	1,498	1,161	1,613	1,289	6,848
60611	4.4	87280	Northside	620	614	589	688	647	3,158
60612	61.7	35888	Northside	1,370	1,849	1,772	1,768	1,533	8,292
60613	7.8	72126	Northside	1,967	2,034	1,739	2,435	2,349	10,524
60614	3.9	92714	Northside	2,513	2,683	2,334	2,924	2,499	12,953
60615	62.0	41108	Southside	1,632	2,157	1,912	2,369	1,985	10,055
60616	26.0	42594	Southside	3,490	2,369	1,979	2,772	2,200	12,810
60617	56.2	37796	Southside	2,648	3,261	3,046	3,469	2,435	14,859
60618	3.5	57500	Northside	3,268	4,274	3,689	4,618	4,299	20,148
60619	97.4	32239	Southside	2,718	3,607	3,262	4,036	2,831	16,454
60620	98.1	32168	Southside	2,759	3,630	3,280	3,932	2,941	16,542
60621	97.9	19832	Southside	1,036	1,431	1,376	1,424	1,128	6,395
60622	8.3	75163	Northside	2,371	2,478	2,165	2,937	2,573	12,524
60623	33.5	28091	Southside	1,751	2,562	2,202	2,682	1,918	11,115
60624	95.3	22204	Northside	1,046	1,726	1,711	1,882	1,508	7,873
60625	4.7	56507	Northside	3,158	3,062	2,798	3,539	3,112	15,669
60626	25.9	36439	Northside	2,784	2,888	2,272	2,878	2,734	13,556
60628	94.7	36242	Southside	2,247	2,958	2,974	3,396	2,527	14,102
60629	23.0	40712	Southside	2,339	3,217	2,468	3,223	2,451	13,698
60630	1.4	62244	Northside	1,646	1,633	1,559	1,909	1,790	8,537
60631	0.5	76400	Northside	518	548	420	637	516	2,639
60632	2.1	38438	Southside	1,486	1,802	1,479	1,998	1,694	8,459

C. Successful Parking Ticket Appeals, By All 59 City of Chicago Zip Codes, 2012 to 2016

60633	4.8	47136	Southside	247	321	292	338	246	1,444
60634	1.4	56382	Northside	1,556	1,608	1,518	1,959	1,683	8,324
60636	96.3	27871	Southside	1,447	1,732	1,675	2,074	1,417	8,345
60637	78.6	26845	Southside	1,719	2,359	2,368	2,694	1,921	11,061
60638	4.0	62511	Southside	1,102	1,242	804	1,219	1,019	5,386
60639	16.6	38798	Northside	2,283	3,129	2,791	3,135	2,670	14,008
60640	18.1	47631	Northside	2,937	2,964	2,621	3,699	3,347	15,568
60641	2.8	51597	Northside	2,515	2,693	2,428	2,831	2,914	13,381
60642	11.0	79633	Southside	844	976	770	1,092	835	4,517
60643	74.5	59593	Southside	1,583	1,940	1,713	1,979	1,467	8,682
60644	94.3	26882	Northside	1,476	2,772	2,801	2,921	1,910	11,880
60645	14.9	47633	Northside	2,386	2,379	2,171	2,501	2,421	11,858
60646	0.8	73246	Northside	697	733	592	688	714	3,424
60647	7.4	56257	Northside	3,190	3,641	3,128	3,992	3,378	17,329
60649	95.5	26797	Southside	1,999	2,558	2,328	2,887	2,109	11,881
60651	63.7	32006	Northside	1,796	3,195	2,837	3,110	2,584	13,522
60652	45.8	61797	Southside	949	1,203	997	1,237	990	5,376
60653	93.8	25923	Southside	1,181	1,555	1,511	1,771	1,509	7,527
60654	7.3	90520	Northside	504	489	411	514	434	2,352
60655	7.7	87105	Southside	375	444	401	497	382	2,099
60656	1.8	57308	Northside	957	1,044	899	959	1,046	4,905
60657	2.8	79638	Northside	2,260	2,326	1,893	2,762	2,370	11,611
60659	8.9	48104	Northside	2,910	2,661	2,536	3,012	3,291	14,410
60660	15.7	41412	Northside	2,327	2,081	1,818	2,258	2,072	10,556
60661	6.9	98882	Northside	237	268	212	278	212	1,207
60706	0.7	52429	Northside	349	292	291	344	505	1,781
60707	16.5	54669	Northside	842	983	790	1,087	1,016	4,718
60827	96.8	31063	Southside	606	703	780	767	569	3,425
X	х	X	Chicago	91,886	107,769	95,406	117,146	98,027	510,234

1. Successful Ticket Appeals, By 16 Majority-Black Zip Codes (RACE), 2012 to 2016

Zip	Race	Income	Location	2012	2013	2014	2015	2016	2012-2016
60612	61.7	35888	Northside	1,370	1,849	1,772	1,768	1,533	8,292

r		1				1	1	1	1
60615	62.0	41108	Southside	1,632	2,157	1,912	2,369	1,985	10,055
60617	56.2	37796	Southside	2,648	3,261	3,046	3,469	2,435	14,859
60619	97.4	32239	Southside	2,718	3,607	3,262	4,036	2,831	16,454
60620	98.1	32168	Southside	2,759	3,630	3,280	3,932	2,941	16,542
60621	97.9	19832	Southside	1,036	1,431	1,376	1,424	1,128	6,395
60624	95.3	22204	Northside	1,046	1,726	1,711	1,882	1,508	7,873
60628	94.7	36242	Southside	2,247	2,958	2,974	3,396	2,527	14,102
60636	96.3	27871	Southside	1,447	1,732	1,675	2,074	1,417	8,345
60637	78.6	26845	Southside	1,719	2,359	2,368	2,694	1,921	11,061
60643	74.5	59593	Southside	1,583	1,940	1,713	1,979	1,467	8,682
60644	94.3	26882	Northside	1,476	2,772	2,801	2,921	1,910	11,880
60649	95.5	26797	Southside	1,999	2,558	2,328	2,887	2,109	11,881
60651	63.7	32006	Northside	1,796	3,195	2,837	3,110	2,584	13,522
60653	93.8	25923	Southside	1,181	1,555	1,511	1,771	1,509	7,527
60827	06.8	21062	Conthoide	606	702	780	767	560	2 425
00827	90.8	51005	Southside	000	/03	/80	/0/	209	3,423
х	Х	х	16 Zip Codes	27,263	37,433	35,346	40,479	30,374	170,895
x	х	х	Chicago	91,886	107,769	95,406	117,146	98,027	510,234

2. Successful Ticket Appeals, By 43 Majority-Other Zip Codes (RACE), 2012 to 2016

Zip	Race	Income	Location	2012	2013	2014	2015	2016	2012-2016
60601	6.8	102254	Northside	250	274	221	300	275	1,320
60602	11.1	57368	Northside	94	52	45	48	39	278
60603	2.8	122031	Northside	77	84	51	53	42	307
60604	7.4	151731	Northside	28	38	32	42	35	175
60605	18.6	87668	Southside	853	742	595	918	669	3,777
60606	4.3	106661	Northside	117	133	93	89	92	524
60607	16.3	85917	Southside	824	948	772	1,118	874	4,536
60608	18.2	36216	Southside	2,070	2,519	2,105	2,546	2,290	11,530
60609	28.9	32284	Southside	1,645	2,407	1,929	2,298	1,721	10,000
60610	18.2	75892	Northside	1,287	1,498	1,161	1,613	1,289	6,848
60611	4.4	87280	Northside	620	614	589	688	647	3,158
60613	7.8	72126	Northside	1,967	2,034	1,739	2,435	2,349	10,524

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60614	3.9	92714	Northside	2,513	2,683	2,334	2,924	2,499	12,953
60616	26.0	42594	Southside	3,490	2,369	1,979	2,772	2,200	12,810
60618	3.5	57500	Northside	3,268	4,274	3,689	4,618	4,299	20,148
60622	8.3	75163	Northside	2,371	2,478	2,165	2,937	2,573	12,524
60623	33.5	28091	Southside	1,751	2,562	2,202	2,682	1,918	11,115
60625	47	56507	Northside	3,158	3.062	2.798	3 539	3.112	15.669
60626	25.9	36439	Northside	2 784	2 888	2 272	2 878	2 734	13 556
60629	23.0	40712	Southside	2,701	3 217	2,272	3 223	2,751	13,698
60620	1.4	62244	Northaida	1 646	1,622	1,550	1,000	1 700	0.527
60630	1.4	02244	Northside	1,040	1,035	1,559	1,909	1,790	8,537
60631	0.5	76400	Northside	518	548	420	637	516	2,639
60632	2.1	38438	Southside	1,486	1,802	1,479	1,998	1,694	8,459
60633	4.8	47136	Southside	247	321	292	338	246	1,444
60634	1.4	56382	Northside	1,556	1,608	1,518	1,959	1,683	8,324
60638	4.0	62511	Southside	1,102	1,242	804	1,219	1,019	5,386
60639	16.6	38798	Northside	2,283	3,129	2,791	3,135	2,670	14,008
60640	18.1	47631	Northside	2,937	2,964	2,621	3,699	3,347	15,568
60641	2.8	51597	Northside	2,515	2,693	2,428	2,831	2,914	13,381
60642	11.0	79633	Southside	844	976	770	1,092	835	4,517
60645	14.9	47633	Northside	2,386	2,379	2,171	2,501	2,421	11,858
60646	0.8	73246	Northside	697	733	592	688	714	3,424
60647	7.4	56257	Northside	3,190	3,641	3,128	3,992	3,378	17,329
60652	45.8	61797	Southside	949	1,203	997	1,237	990	5,376
60654	7.3	90520	Northside	504	489	411	514	434	2,352
60655	7.7	87105	Southside	375	444	401	497	382	2,099
60656	1.8	57308	Northside	957	1,044	899	959	1,046	4,905
60657	2.8	79638	Northside	2,260	2,326	1,893	2,762	2,370	11,611
60659	8.9	48104	Northside	2,910	2,661	2,536	3,012	3,291	14,410
60660	15.7	41412	Northside	2,327	2,081	1,818	2,258	2,072	10,556
60661	6.9	98882	Northside	237	268	212	278	212	1,207
60706	0.7	52429	Northside	349	292	291	344	505	1,781
60707	16.5	54669	Northside	842	983	790	1,087	1,016	4,718
x	x	x	43 Zip Codes	64,623	70,336	60,060	76,667	67,653	339,339
x	x	x	Chicago	91,886	107.769	95,406	117.146	98,027	510.234
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Zip	Race	Income	Location	2012	2013	2014	2015	2016	2012-2016
60608	18.2	36216	Southside	1,036	1,431	1,376	1,424	1,128	6,395
60609	28.9	32284	Southside	1,046	1,726	1,711	1,882	1,508	7,873
60612	61.7	35888	Northside	1,181	1,555	1,511	1,771	1,509	7,527
60615	62.0	41108	Southside	1,999	2,558	2,328	2,887	2,109	11,881
60616	26.0	42594	Southside	1,719	2,359	2,368	2,694	1,921	11,061
60617	56.2	37796	Southside	1,476	2,772	2,801	2,921	1,910	11,880
60619	97.4	32239	Southside	1,447	1,732	1,675	2,074	1,417	8,345
60620	98.1	32168	Southside	1,751	2,562	2,202	2,682	1,918	11,115
60621	97.9	19832	Southside	606	703	780	767	569	3,425
60623	33.5	28091	Southside	1,796	3,195	2,837	3,110	2,584	13,522
60624	95.3	22204	Northside	2,759	3,630	3,280	3,932	2,941	16,542
60626	25.9	36439	Northside	2,718	3,607	3,262	4,036	2,831	16,454
60628	94.7	36242	Southside	1,645	2,407	1,929	2,298	1,721	10,000
60629	23.0	40712	Southside	1,370	1,849	1,772	1,768	1,533	8,292
60632	2.1	38438	Southside	2,070	2,519	2,105	2,546	2,290	11,530
60633	4.8	47136	Southside	2,247	2,958	2,974	3,396	2,527	14,102
60636	96.3	27871	Southside	2,784	2,888	2,272	2,878	2,734	13,556
60637	78.6	26845	Southside	2,648	3,261	3,046	3,469	2,435	14,859
60639	16.6	38798	Northside	1,486	1,802	1,479	1,998	1,694	8,459
60640	18.1	47631	Northside	2,283	3,129	2,791	3,135	2,670	14,008
60644	94.3	26882	Northside	2,339	3,217	2,468	3,223	2,451	13,698
60645	14.9	47633	Northside	1,632	2,157	1,912	2,369	1,985	10,055
60649	95.5	26797	Southside	2,327	2,081	1,818	2,258	2,072	10,556
60651	63.7	32006	Northside	3,490	2,369	1,979	2,772	2,200	12,810
60653	93.8	25923	Southside	247	321	292	338	246	1,444
60659	8.9	48104	Northside	2,937	2,964	2,621	3,699	3,347	15,568
60660	15.7	41412	Northside	2,386	2,379	2,171	2,501	2,421	11,858
60827	96.8	31063	Southside	2,910	2,661	2,536	3,012	3,291	14,410
Х	х	х	28 Zip Codes	54,335	66,792	60,296	71,840	57,962	311,225
Х	Х	Х	Chicago	91,886	107,769	95,406	117,146	98,027	510,234

3. Successful Ticket Appeals, By 28 Lower-Income Zip Codes (INCOME), 2012 to 2016

Zip	Race	Income	Location	2012	2013	2014	2015	2016	2012-2016
60601	6.8	102254	Northside	250	274	221	300	275	1,320
60602	11.1	57368	Northside	94	52	45	48	39	278
60603	2.8	122031	Northside	77	84	51	53	42	307
60604	7.4	151731	Northside	28	38	32	42	35	175
60605	18.6	87668	Southside	853	742	595	918	669	3,777
60606	4.3	106661	Northside	117	133	93	89	92	524
60607	16.3	85917	Southside	824	948	772	1,118	874	4,536
60610	18.2	75892	Northside	1,287	1,498	1,161	1,613	1,289	6,848
60611	4.4	87280	Northside	620	614	589	688	647	3,158
60613	7.8	72126	Northside	1,967	2,034	1,739	2,435	2,349	10,524
60614	3.9	92714	Northside	2,513	2,683	2,334	2,924	2,499	12,953
60618	3.5	57500	Northside	3,268	4,274	3,689	4,618	4,299	20,148
60622	8.3	75163	Northside	2,371	2,478	2,165	2,937	2,573	12,524
60625	4.7	56507	Northside	3,158	3,062	2,798	3,539	3,112	15,669
60630	1.4	62244	Northside	1,646	1,633	1,559	1,909	1,790	8,537
60631	0.5	76400	Northside	518	548	420	637	516	2,639
60634	1.4	56382	Northside	1,556	1,608	1,518	1,959	1,683	8,324
60638	4.0	62511	Southside	1,102	1,242	804	1,219	1,019	5,386
60641	2.8	51597	Northside	2,515	2,693	2,428	2,831	2,914	13,381
60642	11.0	79633	Southside	844	976	770	1,092	835	4,517
60643	74.5	59593	Southside	1,583	1,940	1,713	1,979	1,467	8,682
60646	0.8	73246	Northside	697	733	592	688	714	3,424
60647	7.4	56257	Northside	3,190	3,641	3,128	3,992	3,378	17,329
60652	45.8	61797	Southside	949	1,203	997	1,237	990	5,376
60654	7.3	90520	Northside	504	489	411	514	434	2,352
60655	7.7	87105	Southside	375	444	401	497	382	2,099
60656	1.8	57308	Northside	957	1,044	899	959	1,046	4,905
60657	2.8	79638	Northside	2,260	2,326	1,893	2,762	2,370	11,611
60661	6.9	98882	Northside	237	268	212	278	212	1,207
60706	0.7	52429	Northside	349	292	291	344	505	1,781
60707	16.5	54669	Northside	842	983	790	1,087	1,016	4,718

4. Successful Ticket Appeals, By 31 Higher-Income Zip Codes (INCOME), 2012 to 2016

Х	х	Х	31 Zip Codes	37,551	40,977	35,110	45,306	40,065	199,009
х	x	х	Chicago	91,886	107,769	95,406	117,146	98,027	510,234

5. Successful Ticket Appeals, By 25 Southside Zip Codes (LOCATION), 2012 to 2016

Zip	Race	Income	Location	2012	2013	2014	2015	2016	2012-2016
60605	18.6	87668	Southside	853	742	595	918	669	3,777
60607	16.3	85917	Southside	824	948	772	1,118	874	4,536
60608	18.2	36216	Southside	2,070	2,519	2,105	2,546	2,290	11,530
60609	28.9	32284	Southside	1,645	2,407	1,929	2,298	1,721	10,000
60615	62.0	41108	Southside	1,632	2,157	1,912	2,369	1,985	10,055
60616	26.0	42594	Southside	3,490	2,369	1,979	2,772	2,200	12,810
60617	56.2	37796	Southside	2,648	3,261	3,046	3,469	2,435	14,859
60619	97.4	32239	Southside	2,718	3,607	3,262	4,036	2,831	16,454
60620	98.1	32168	Southside	2,759	3,630	3,280	3,932	2,941	16,542
60621	97.9	19832	Southside	1,036	1,431	1,376	1,424	1,128	6,395
60623	33.5	28091	Southside	1,751	2,562	2,202	2,682	1,918	11,115
60628	94.7	36242	Southside	2,247	2,958	2,974	3,396	2,527	14,102
60629	23.0	40712	Southside	2,339	3,217	2,468	3,223	2,451	13,698
60632	2.1	38438	Southside	1,486	1,802	1,479	1,998	1,694	8,459
60633	4.8	47136	Southside	247	321	292	338	246	1,444
60636	96.3	27871	Southside	1,447	1,732	1,675	2,074	1,417	8,345
60637	78.6	26845	Southside	1,719	2,359	2,368	2,694	1,921	11,061
60638	4.0	62511	Southside	1,102	1,242	804	1,219	1,019	5,386
60642	11.0	79633	Southside	844	976	770	1,092	835	4,517
60643	74.5	59593	Southside	1,583	1,940	1,713	1,979	1,467	8,682
60649	95.5	26797	Southside	1,999	2,558	2,328	2,887	2,109	11,881
60652	45.8	61797	Southside	949	1,203	997	1,237	990	5,376
60653	93.8	25923	Southside	1,181	1,555	1,511	1,771	1,509	7,527
60655	7.7	87105	Southside	375	444	401	497	382	2,099
60827	96.8	31063	Southside	606	703	780	767	569	3,425
x	x	х	25 Zip Codes	39,550	48,643	43,018	52,736	40,128	224,075
x	x	Х	Chicago	91,886	107,769	95,406	117,146	98,027	510,234

Zip	Race	Income	Location	2012	2013	2014	2015	2016	2012-2016
60601	6.8	102254	Northside	250	274	221	300	275	1,320
60602	11.1	57368	Northside	94	52	45	48	39	278
60603	2.8	122031	Northside	77	84	51	53	42	307
60604	7.4	151731	Northside	28	38	32	42	35	175
60606	4.3	106661	Northside	117	133	93	89	92	524
60610	18.2	75892	Northside	1,287	1,498	1,161	1,613	1,289	6,848
60611	4.4	87280	Northside	620	614	589	688	647	3,158
60612	61.7	35888	Northside	1,370	1,849	1,772	1,768	1,533	8,292
60613	7.8	72126	Northside	1,967	2,034	1,739	2,435	2,349	10,524
60614	3.9	92714	Northside	2,513	2,683	2,334	2,924	2,499	12,953
60618	3.5	57500	Northside	3,268	4,274	3,689	4,618	4,299	20,148
60622	8.3	75163	Northside	2,371	2,478	2,165	2,937	2,573	12,524
60624	95.3	22204	Northside	1,046	1,726	1,711	1,882	1,508	7,873
60625	4.7	56507	Northside	3,158	3,062	2,798	3,539	3,112	15,669
60626	25.9	36439	Northside	2,784	2,888	2,272	2,878	2,734	13,556
60630	1.4	62244	Northside	1,646	1,633	1,559	1,909	1,790	8,537
60631	0.5	76400	Northside	518	548	420	637	516	2,639
60634	1.4	56382	Northside	1,556	1,608	1,518	1,959	1,683	8,324
60639	16.6	38798	Northside	2,283	3,129	2,791	3,135	2,670	14,008
60640	18.1	47631	Northside	2,937	2,964	2,621	3,699	3,347	15,568
60641	2.8	51597	Northside	2,515	2,693	2,428	2,831	2,914	13,381
60644	94.3	26882	Northside	1,476	2,772	2,801	2,921	1,910	11,880
60645	14.9	47633	Northside	2,386	2,379	2,171	2,501	2,421	11,858
60646	0.8	73246	Northside	697	733	592	688	714	3,424
60647	7.4	56257	Northside	3,190	3,641	3,128	3,992	3,378	17,329
60651	63.7	32006	Northside	1,796	3,195	2,837	3,110	2,584	13,522
60654	7.3	90520	Northside	504	489	411	514	434	2,352
60656	1.8	57308	Northside	957	1,044	899	959	1,046	4,905
60657	2.8	79638	Northside	2,260	2,326	1,893	2,762	2,370	11,611
60659	8.9	48104	Northside	2,910	2,661	2,536	3,012	3,291	14,410

6. Successful Ticket Appeals, By 34 Northside Zip Codes (LOCATION), 2012 to 2016

60660	15.7	41412	Northside	2,327	2,081	1,818	2,258	2,072	10,556
60661	6.9	98882	Northside	237	268	212	278	212	1,207
60706	0.7	52429	Northside	349	292	291	344	505	1,781
60707	16.5	54669	Northside	842	983	790	1,087	1,016	4,718
x	х	х	34 Zip Codes	52,336	59,126	52,388	64,410	57,899	286,159
x	x	х	Chicago	91,886	107,769	95,406	117,146	98,027	510,234

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Zip	Race	Income	Location	2012	2013	2014	2015	2016	2012-16
60601	6.8	102254	Northside	0.1277	0.1397	0.1300	0.1692	0.1463	0.1422
60602	11.1	57368	Northside	0.1702	0.1270	0.1050	0.1405	0.0989	0.1305
60603	2.8	122031	Northside	0.1856	0.1753	0.1212	0.1636	0.1188	0.1534
60604	7.4	151731	Northside	0.1309	0.1150	0.0900	0.1201	0.1075	0.1123
60605	18.6	87668	Southside	0.1861	0.1786	0.1460	0.1944	0.1633	0.1746
60606	4.3	106661	Northside	0.1271	0.1410	0.1081	0.1320	0.1348	0.1288
60607	16.3	85917	Southside	0.1383	0.1542	0.1200	0.1664	0.1485	0.1454
60608	18.2	36216	Southside	0.0888	0.1041	0.0892	0.1036	0.1007	0.0973
60609	28.9	32284	Southside	0.0814	0.1037	0.0938	0.1002	0.0902	0.0942
60610	18.2	75892	Northside	0.1559	0.1715	0.1380	0.1865	0.1616	0.1628
60611	4.4	87280	Northside	0.1510	0.1491	0.1348	0.1708	0.1631	0.1532
60612	61.7	35888	Northside	0.1141	0.1245	0.1236	0.1306	0.1299	0.1245
60613	7.8	72126	Northside	0.1470	0.1557	0.1367	0.1742	0.1625	0.1553
60614	3.9	92714	Northside	0.1516	0.1680	0.1403	0.1802	0.1594	0.1596
60615	62.0	41108	Southside	0.1336	0.1530	0.1431	0.1616	0.1582	0.1502
60616	26.0	42594	Southside	0.2045	0.1679	0.1402	0.1830	0.1572	0.1715
60617	56.2	37796	Southside	0.1197	0.1300	0.1262	0.1396	0.1322	0.1295
60618	3.5	57500	Northside	0.1189	0.1340	0.1191	0.1419	0.1359	0.1301
60619	97.4	32239	Southside	0.1276	0.1424	0.1340	0.1516	0.1405	0.1395
60620	98.1	32168	Southside	0.1189	0.1426	0.1299	0.1421	0.1352	0.1340
60621	97.9	19832	Southside	0.0938	0.1091	0.1069	0.1085	0.1165	0.1068
60622	8.3	75163	Northside	0.1120	0.1188	0.1042	0.1326	0.1214	0.1177
60623	33.5	28091	Southside	0.0581	0.0740	0.0648	0.0845	0.0698	0.0702
60624	95.3	22204	Northside	0.0810	0.0934	0.0936	0.1099	0.1090	0.0975
60625	4.7	56507	Northside	0.1335	0.1359	0.1234	0.1443	0.1375	0.1350
60626	25.9	36439	Northside	0.1570	0.1609	0.1363	0.1728	0.1712	0.1595
60628	94.7	36242	Southside	0.1121	0.1277	0.1242	0.1402	0.1360	0.1280
60629	23.0	40712	Southside	0.0738	0.0905	0.0751	0.0950	0.0849	0.0839
60630	1.4	62244	Northside	0.1496	0.1448	0.1346	0.1587	0.1548	0.1485
60631	0.5	76400	Northside	0.1753	0.1729	0.1347	0.1833	0.1538	0.1639
60632	2.1	38438	Southside	0.0574	0.0667	0.0555	0.0768	0.0666	0.0644
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D. Appeals Rate (x100), By All 59 City of Chicago Zip Codes, 2012 to 2016

60633	4.8	47136	Southside	0.1535	0.1615	0.1430	0.1531	0.1549	0.1531
60634	1.4	56382	Northside	0.1253	0.1284	0.1126	0.1390	0.1205	0.1252
60636	96.3	27871	Southside	0.0963	0.1065	0.0988	0.1159	0.1077	0.1051
60637	78.6	26845	Southside	0.1163	0.1264	0.1276	0.1457	0.1371	0.1306
60638	4.0	62511	Southside	0.1393	0.1407	0.1041	0.1461	0.1208	0.1305
60639	16.6	38798	Northside	0.0761	0.0937	0.0848	0.0950	0.0866	0.0873
60640	18.1	47631	Northside	0.1549	0.1609	0.1427	0.1788	0.1734	0.1622
60641	2.8	51597	Northside	0.1209	0.1245	0.1118	0.1274	0.1292	0.1228
60642	11.0	79633	Southside	0.1307	0.1410	0.1113	0.1497	0.1246	0.1316
60643	74.5	59593	Southside	0.1269	0.1456	0.1272	0.1413	0.1360	0.1356
60644	94.3	26882	Northside	0.0884	0.1176	0.1154	0.1289	0.1168	0.1143
60645	14.9	47633	Northside	0.1793	0.1814	0.1674	0.1844	0.1856	0.1797
60646	0.8	73246	Northside	0.1675	0.1660	0.1373	0.1611	0.1678	0.1601
60647	7.4	56257	Northside	0.1053	0.1130	0.0995	0.1194	0.1094	0.1093
60649	95.5	26797	Southside	0.1197	0.1329	0.1291	0.1440	0.1302	0.1315
60651	63.7	32006	Northside	0.0828	0.1088	0.0986	0.1164	0.1065	0.1030
60652	45.8	61797	Southside	0.1139	0.1277	0.1100	0.1265	0.1238	0.1205
60653	93.8	25923	Southside	0.1175	0.1320	0.1244	0.1431	0.1344	0.1306
60654	7.3	90520	Northside	0.1508	0.1494	0.1267	0.1623	0.1401	0.1459
60655	7.7	87105	Southside	0.1413	0.1688	0.1423	0.1588	0.1407	0.1506
60656	1.8	57308	Northside	0.2061	0.2155	0.1943	0.2078	0.2013	0.2052
60657	2.8	79638	Northside	0.1468	0.1584	0.1320	0.1772	0.1527	0.1534
60659	8.9	48104	Northside	0.2011	0.1877	0.1745	0.1960	0.2124	0.1944
60660	15.7	41412	Northside	0.1810	0.1785	0.1572	0.1807	0.1835	0.1764
60661	6.9	98882	Northside	0.1555	0.1640	0.1236	0.1620	0.1361	0.1488
60706	0.7	52429	Northside	0.1543	0.1478	0.1352	0.1497	0.1798	0.1542
60707	16.5	54669	Northside	0.1215	0.1409	0.1116	0.1455	0.1372	0.1315
60827	96.8	31063	Southside	0.1139	0.1193	0.1155	0.1253	0.1166	0.1183
Х	Х	x	Chicago	0.1317	0.1392	0.1217	0.1464	0.1361	0.1352
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1. Appeals Rate (x100), By 16 Majority-Black Zip Codes (RACE), 2012 to 2016

Zip	Race	Income	Location	2012	2013	2014	2015	2016	2012-2016
60612	61.7	35888	Northside	0.1141	0.1245	0.1236	0.1306	0.1299	0.1245

60615	62.0	41108	Southside	0.1336	0.1530	0.1431	0.1616	0.1582	0.1502
60617	56.2	37796	Southside	0.1197	0.1300	0.1262	0.1396	0.1322	0.1295
60619	97.4	32239	Southside	0.1276	0.1424	0.1340	0.1516	0.1405	0.1395
60620	98.1	32168	Southside	0.1189	0.1426	0.1299	0.1421	0.1352	0.1340
60621	97.9	19832	Southside	0.0938	0.1091	0.1069	0.1085	0.1165	0.1068
60624	95.3	22204	Northside	0.0810	0.0934	0.0936	0.1099	0.1090	0.0975
60628	94.7	36242	Southside	0.1121	0.1277	0.1242	0.1402	0.1360	0.1280
60636	96.3	27871	Southside	0.0963	0.1065	0.0988	0.1159	0.1077	0.1051
60637	78.6	26845	Southside	0.1163	0.1264	0.1276	0.1457	0.1371	0.1306
60643	74.5	59593	Southside	0.1269	0.1456	0.1272	0.1413	0.1360	0.1356
60644	94.3	26882	Northside	0.0884	0.1176	0.1154	0.1289	0.1168	0.1143
60649	95.5	26797	Southside	0.1197	0.1329	0.1291	0.1440	0.1302	0.1315
60651	63.7	32006	Northside	0.0828	0.1088	0.0986	0.1164	0.1065	0.1030
60653	93.8	25923	Southside	0.1175	0.1320	0.1244	0.1431	0.1344	0.1306
60827	96.8	31063	Southside	0.1139	0.1193	0.1155	0.1253	0.1166	0.1183
х	х	х	16 Zip Codes	0.1102	0.1257	0.1199	0.1340	0.1277	0.1237
х	х	х	Chicago	0.1317	0.1392	0.1217	0.1464	0.1361	0.1352
х	х	Х	Difference	-0.0215	-0.0135	-0.0018	-0.0124	-0.0084	-0.0115

2. Appeals Rate (x100), By 43 Majority-Other Zip Codes (RACE), 2012 to 2016

Zip	Race	Income	Location	2012	2013	2014	2015	2016	2012-2016
60601	6.8	102254	Northside	0.1277	0.1397	0.1300	0.1692	0.1463	0.1422
60602	11.1	57368	Northside	0.1702	0.1270	0.1050	0.1405	0.0989	0.1305
60603	2.8	122031	Northside	0.1856	0.1753	0.1212	0.1636	0.1188	0.1534
60604	7.4	151731	Northside	0.1309	0.1150	0.0900	0.1201	0.1075	0.1123
60605	18.6	87668	Southside	0.1861	0.1786	0.1460	0.1944	0.1633	0.1746
60606	4.3	106661	Northside	0.1271	0.1410	0.1081	0.1320	0.1348	0.1288
60607	16.3	85917	Southside	0.1383	0.1542	0.1200	0.1664	0.1485	0.1454
60608	18.2	36216	Southside	0.0888	0.1041	0.0892	0.1036	0.1007	0.0973
60609	28.9	32284	Southside	0.0814	0.1037	0.0938	0.1002	0.0902	0.0942
60610	18.2	75892	Northside	0.1559	0.1715	0.1380	0.1865	0.1616	0.1628
60611	4.4	87280	Northside	0.1510	0.1491	0.1348	0.1708	0.1631	0.1532

60613	7.8	72126	Northside	0.1470	0.1557	0.1367	0.1742	0.1625	0.1553
60614	3.9	92714	Northside	0.1516	0.1680	0.1403	0.1802	0.1594	0.1596
60616	26.0	42594	Southside	0.2045	0.1679	0.1402	0.1830	0.1572	0.1715
60618	3.5	57500	Northside	0.1189	0.1340	0.1191	0.1419	0.1359	0.1301
60622	8.3	75163	Northside	0.1120	0.1188	0.1042	0.1326	0.1214	0.1177
60623	33.5	28091	Southside	0.0581	0.0740	0.0648	0.0845	0.0698	0.0702
60625	4.7	56507	Northside	0.1335	0.1359	0.1234	0.1443	0.1375	0.1350
60626	25.9	36439	Northside	0.1570	0.1609	0.1363	0.1728	0.1712	0.1595
60629	23.0	40712	Southside	0.0738	0.0905	0.0751	0.0950	0.0849	0.0839
60630	1.4	62244	Northside	0.1496	0.1448	0.1346	0.1587	0.1548	0.1485
60631	0.5	76400	Northside	0.1753	0.1729	0.1347	0.1833	0.1538	0.1639
60632	2.1	38438	Southside	0.0574	0.0667	0.0555	0.0768	0.0666	0.0644
60633	4.8	47136	Southside	0.1535	0.1615	0.1430	0.1531	0.1549	0.1531
60634	1.4	56382	Northside	0.1253	0.1284	0.1126	0.1390	0.1205	0.1252
60638	4.0	62511	Southside	0.1393	0.1407	0.1041	0.1461	0.1208	0.1305
60639	16.6	38798	Northside	0.0761	0.0937	0.0848	0.0950	0.0866	0.0873
60640	18.1	47631	Northside	0.1549	0.1609	0.1427	0.1788	0.1734	0.1622
60641	2.8	51597	Northside	0.1209	0.1245	0.1118	0.1274	0.1292	0.1228
60642	11.0	79633	Southside	0.1307	0.1410	0.1113	0.1497	0.1246	0.1316
60645	14.9	47633	Northside	0.1793	0.1814	0.1674	0.1844	0.1856	0.1797
60646	0.8	73246	Northside	0.1675	0.1660	0.1373	0.1611	0.1678	0.1601
60647	7.4	56257	Northside	0.1053	0.1130	0.0995	0.1194	0.1094	0.1093
60652	45.8	61797	Southside	0.1139	0.1277	0.1100	0.1265	0.1238	0.1205
60654	7.3	90520	Northside	0.1508	0.1494	0.1267	0.1623	0.1401	0.1459
60655	7.7	87105	Southside	0.1413	0.1688	0.1423	0.1588	0.1407	0.1506
60656	1.8	57308	Northside	0.2061	0.2155	0.1943	0.2078	0.2013	0.2052
60657	2.8	79638	Northside	0.1468	0.1584	0.1320	0.1772	0.1527	0.1534
60659	8.9	48104	Northside	0.2011	0.1877	0.1745	0.1960	0.2124	0.1944
60660	15.7	41412	Northside	0.1810	0.1785	0.1572	0.1807	0.1835	0.1764
60661	6.9	98882	Northside	0.1555	0.1640	0.1236	0.1620	0.1361	0.1488
60706	0.7	52429	Northside	0.1543	0.1478	0.1352	0.1497	0.1798	0.1542
60707	16.5	54669	Northside	0.1215	0.1409	0.1116	0.1455	0.1372	0.1315
Х	Х	Х	43 Zip Codes	0.1397	0.1442	0.1224	0.1511	0.1393	0.1395
Х	Х	Х	Chicago	0.1317	0.1392	0.1217	0.1464	0.1361	0.1352

х	Х	Х	Difference	0.0080	0.0050	0.0007	0.0047	0.0032	0.0043

3. Appeals Rate (x100), By 28 Lower-Income Zip Codes (INCOME), 2012 to 2016

Zip	Race	Income	Location	2012	2013	2014	2015	2016	2012-2016
60608	18.2	36216	Southside	0.0888	0.1041	0.0892	0.1036	0.1007	0.0973
60609	28.9	32284	Southside	0.0814	0.1037	0.0938	0.1002	0.0902	0.0942
60612	61.7	35888	Northside	0.1141	0.1245	0.1236	0.1306	0.1299	0.1245
60615	62.0	41108	Southside	0.1336	0.1530	0.1431	0.1616	0.1582	0.1502
60616	26.0	42594	Southside	0.2045	0.1679	0.1402	0.1830	0.1572	0.1715
60617	56.2	37796	Southside	0.1197	0.1300	0.1262	0.1396	0.1322	0.1295
60619	97.4	32239	Southside	0.1276	0.1424	0.1340	0.1516	0.1405	0.1395
60620	98.1	32168	Southside	0.1189	0.1426	0.1299	0.1421	0.1352	0.1340
60621	97.9	19832	Southside	0.0938	0.1091	0.1069	0.1085	0.1165	0.1068
60623	33.5	28091	Southside	0.0581	0.0740	0.0648	0.0845	0.0698	0.0702
60624	95.3	22204	Northside	0.0810	0.0934	0.0936	0.1099	0.1090	0.0975
60626	25.9	36439	Northside	0.1570	0.1609	0.1363	0.1728	0.1712	0.1595
60628	94.7	36242	Southside	0.1121	0.1277	0.1242	0.1402	0.1360	0.1280
60629	23.0	40712	Southside	0.0738	0.0905	0.0751	0.0950	0.0849	0.0839
60632	2.1	38438	Southside	0.0574	0.0667	0.0555	0.0768	0.0666	0.0644
60633	4.8	47136	Southside	0.1535	0.1615	0.1430	0.1531	0.1549	0.1531
60636	96.3	27871	Southside	0.0963	0.1065	0.0988	0.1159	0.1077	0.1051
60637	78.6	26845	Southside	0.1163	0.1264	0.1276	0.1457	0.1371	0.1306
60639	16.6	38798	Northside	0.0761	0.0937	0.0848	0.0950	0.0866	0.0873
60640	18.1	47631	Northside	0.1549	0.1609	0.1427	0.1788	0.1734	0.1622
60644	94.3	26882	Northside	0.0884	0.1176	0.1154	0.1289	0.1168	0.1143
60645	14.9	47633	Northside	0.1793	0.1814	0.1674	0.1844	0.1856	0.1797
60649	95.5	26797	Southside	0.1197	0.1329	0.1291	0.1440	0.1302	0.1315
60651	63.7	32006	Northside	0.0828	0.1088	0.0986	0.1164	0.1065	0.1030
60653	93.8	25923	Southside	0.1175	0.1320	0.1244	0.1431	0.1344	0.1306
60659	8.9	48104	Northside	0.2011	0.1877	0.1745	0.1960	0.2124	0.1944
60660	15.7	41412	Northside	0.1810	0.1785	0.1572	0.1807	0.1835	0.1764
60827	96.8	31063	Southside	0.1139	0.1193	0.1155	0.1253	0.1166	0.1183

Х	х	Х	28 Zip Codes	0.1179	0.1285	0.1184	0.1360	0.1301	0.1263
Х	х	Х	Chicago	0.1317	0.1392	0.1217	0.1464	0.1361	0.1352
Х	х	х	Difference	-0.0138	-0.0107	-0.0033	-0.0104	-0.0060	-0.0089

4. Appeals Rate (x100), By 31 Higher-Income Zip Codes (INCOME), 2012 to 2016

Zip	Race	Income	Location	2012	2013	2014	2015	2016	2012-2016
60601	6.8	102254	Northside	0.1277	0.1397	0.1300	0.1692	0.1463	0.1422
60602	11.1	57368	Northside	0.1702	0.1270	0.1050	0.1405	0.0989	0.1305
60603	2.8	122031	Northside	0.1856	0.1753	0.1212	0.1636	0.1188	0.1534
60604	7.4	151731	Northside	0.1309	0.1150	0.0900	0.1201	0.1075	0.1123
60605	18.6	87668	Southside	0.1861	0.1786	0.1460	0.1944	0.1633	0.1746
60606	4.3	106661	Northside	0.1271	0.1410	0.1081	0.1320	0.1348	0.1288
60607	16.3	85917	Southside	0.1383	0.1542	0.1200	0.1664	0.1485	0.1454
60610	18.2	75892	Northside	0.1559	0.1715	0.1380	0.1865	0.1616	0.1628
60611	4.4	87280	Northside	0.1510	0.1491	0.1348	0.1708	0.1631	0.1532
60613	7.8	72126	Northside	0.1470	0.1557	0.1367	0.1742	0.1625	0.1553
60614	3.9	92714	Northside	0.1516	0.1680	0.1403	0.1802	0.1594	0.1596
60618	3.5	57500	Northside	0.1189	0.1340	0.1191	0.1419	0.1359	0.1301
60622	8.3	75163	Northside	0.1120	0.1188	0.1042	0.1326	0.1214	0.1177
60625	4.7	56507	Northside	0.1335	0.1359	0.1234	0.1443	0.1375	0.1350
60630	1.4	62244	Northside	0.1496	0.1448	0.1346	0.1587	0.1548	0.1485
60631	0.5	76400	Northside	0.1753	0.1729	0.1347	0.1833	0.1538	0.1639
60634	1.4	56382	Northside	0.1253	0.1284	0.1126	0.1390	0.1205	0.1252
60638	4.0	62511	Southside	0.1393	0.1407	0.1041	0.1461	0.1208	0.1305
60641	2.8	51597	Northside	0.1209	0.1245	0.1118	0.1274	0.1292	0.1228
60642	11.0	79633	Southside	0.1307	0.1410	0.1113	0.1497	0.1246	0.1316
60643	74.5	59593	Southside	0.1269	0.1456	0.1272	0.1413	0.1360	0.1356
60646	0.8	73246	Northside	0.1675	0.1660	0.1373	0.1611	0.1678	0.1601
60647	7.4	56257	Northside	0.1053	0.1130	0.0995	0.1194	0.1094	0.1093
60652	45.8	61797	Southside	0.1139	0.1277	0.1100	0.1265	0.1238	0.1205
60654	7.3	90520	Northside	0.1508	0.1494	0.1267	0.1623	0.1401	0.1459
60655	7.7	87105	Southside	0.1413	0.1688	0.1423	0.1588	0.1407	0.1506
60656	1.8	57308	Northside	0.2061	0.2155	0.1943	0.2078	0.2013	0.2052

60657	2.8	79638	Northside	0.1468	0.1584	0.1320	0.1772	0.1527	0.1534
60661	6.9	98882	Northside	0.1555	0.1640	0.1236	0.1620	0.1361	0.1488
60706	0.7	52429	Northside	0.1543	0.1478	0.1352	0.1497	0.1798	0.1542
60707	16.5	54669	Northside	0.1215	0.1409	0.1116	0.1455	0.1372	0.1315
х	х	х	31 Zip Codes	0.1441	0.1488	0.1247	0.1559	0.1416	0.1432
x	x	x	Chicago	0.1317	0.1392	0.1217	0.1464	0.1361	0.1352
x	x	x	Difference	0.0124	0.0096	0.0030	0.0095	0.0055	0.0080

5. Appeals Rate (x100), By 25 Southside Zip Codes (LOCATION), 2012 to 2016

Zip	Race	Income	Location	2012	2013	2014	2015	2016	2012-2016
60605	18.6	87668	Southside	0.1861	0.1786	0.1460	0.1944	0.1633	0.1746
60607	16.3	85917	Southside	0.1383	0.1542	0.1200	0.1664	0.1485	0.1454
60608	18.2	36216	Southside	0.0888	0.1041	0.0892	0.1036	0.1007	0.0973
60609	28.9	32284	Southside	0.0814	0.1037	0.0938	0.1002	0.0902	0.0942
60615	62.0	41108	Southside	0.1336	0.1530	0.1431	0.1616	0.1582	0.1502
60616	26.0	42594	Southside	0.2045	0.1679	0.1402	0.1830	0.1572	0.1715
60617	56.2	37796	Southside	0.1197	0.1300	0.1262	0.1396	0.1322	0.1295
60619	97.4	32239	Southside	0.1276	0.1424	0.1340	0.1516	0.1405	0.1395
60620	98.1	32168	Southside	0.1189	0.1426	0.1299	0.1421	0.1352	0.1340
60621	97.9	19832	Southside	0.0938	0.1091	0.1069	0.1085	0.1165	0.1068
60623	33.5	28091	Southside	0.0581	0.0740	0.0648	0.0845	0.0698	0.0702
60628	94.7	36242	Southside	0.1121	0.1277	0.1242	0.1402	0.1360	0.1280
60629	23.0	40712	Southside	0.0738	0.0905	0.0751	0.0950	0.0849	0.0839
60632	2.1	38438	Southside	0.0574	0.0667	0.0555	0.0768	0.0666	0.0644
60633	4.8	47136	Southside	0.1535	0.1615	0.1430	0.1531	0.1549	0.1531
60636	96.3	27871	Southside	0.0963	0.1065	0.0988	0.1159	0.1077	0.1051
60637	78.6	26845	Southside	0.1163	0.1264	0.1276	0.1457	0.1371	0.1306
60638	4.0	62511	Southside	0.1393	0.1407	0.1041	0.1461	0.1208	0.1305
60642	11.0	79633	Southside	0.1307	0.1410	0.1113	0.1497	0.1246	0.1316
60643	74.5	59593	Southside	0.1269	0.1456	0.1272	0.1413	0.1360	0.1356
60649	95.5	26797	Southside	0.1197	0.1329	0.1291	0.1440	0.1302	0.1315
60652	45.8	61797	Southside	0.1139	0.1277	0.1100	0.1265	0.1238	0.1205
60653	93.8	25923	Southside	0.1175	0.1320	0.1244	0.1431	0.1344	0.1306

60655	7.7	87105	Southside	0.1413	0.1688	0.1423	0.1588	0.1407	0.1506
60827	96.8	31063	Southside	0.1139	0.1193	0.1155	0.1253	0.1166	0.1183
Х	х	Х	25 Zip Codes	0.1185	0.1299	0.1153	0.1359	0.1251	0.1251
Х	х	Х	Chicago	0.1317	0.1392	0.1217	0.1464	0.1361	0.1352
х	х	Х	Difference	-0.0132	-0.0093	-0.0064	-0.0105	-0.011	-0.0101

6. Appeals Rate (x100), By 34 Northside Zip Codes (LOCATION), 2012 to 2016

Zip	Race	Income	Location	2012	2013	2014	2015	2016	2012-16
60601	6.8	102254	Northside	0.1277	0.1397	0.1300	0.1692	0.1463	0.1422
60602	11.1	57368	Northside	0.1702	0.1270	0.1050	0.1405	0.0989	0.1305
60603	2.8	122031	Northside	0.1856	0.1753	0.1212	0.1636	0.1188	0.1534
60604	7.4	151731	Northside	0.1309	0.1150	0.0900	0.1201	0.1075	0.1123
60606	4.3	106661	Northside	0.1271	0.1410	0.1081	0.1320	0.1348	0.1288
60610	18.2	75892	Northside	0.1559	0.1715	0.1380	0.1865	0.1616	0.1628
60611	4.4	87280	Northside	0.1510	0.1491	0.1348	0.1708	0.1631	0.1532
60612	61.7	35888	Northside	0.1141	0.1245	0.1236	0.1306	0.1299	0.1245
60613	7.8	72126	Northside	0.1470	0.1557	0.1367	0.1742	0.1625	0.1553
60614	3.9	92714	Northside	0.1516	0.1680	0.1403	0.1802	0.1594	0.1596
60618	3.5	57500	Northside	0.1189	0.1340	0.1191	0.1419	0.1359	0.1301
60622	8.3	75163	Northside	0.1120	0.1188	0.1042	0.1326	0.1214	0.1177
60624	95.3	22204	Northside	0.0810	0.0934	0.0936	0.1099	0.1090	0.0975
60625	4.7	56507	Northside	0.1335	0.1359	0.1234	0.1443	0.1375	0.1350
60626	25.9	36439	Northside	0.1570	0.1609	0.1363	0.1728	0.1712	0.1595
60630	1.4	62244	Northside	0.1496	0.1448	0.1346	0.1587	0.1548	0.1485
60631	0.5	76400	Northside	0.1753	0.1729	0.1347	0.1833	0.1538	0.1639
60634	1.4	56382	Northside	0.1253	0.1284	0.1126	0.1390	0.1205	0.1252
60639	16.6	38798	Northside	0.0761	0.0937	0.0848	0.0950	0.0866	0.0873
60640	18.1	47631	Northside	0.1549	0.1609	0.1427	0.1788	0.1734	0.1622
60641	2.8	51597	Northside	0.1209	0.1245	0.1118	0.1274	0.1292	0.1228
60644	94.3	26882	Northside	0.0884	0.1176	0.1154	0.1289	0.1168	0.1143
60645	14.9	47633	Northside	0.1793	0.1814	0.1674	0.1844	0.1856	0.1797
60646	0.8	73246	Northside	0.1675	0.1660	0.1373	0.1611	0.1678	0.1601
60647	7.4	56257	Northside	0.1053	0.1130	0.0995	0.1194	0.1094	0.1093
									1

60651	63.7	32006	Northside	0.0828	0.1088	0.0986	0.1164	0.1065	0.1030
60654	7.3	90520	Northside	0.1508	0.1494	0.1267	0.1623	0.1401	0.1459
60656	1.8	57308	Northside	0.2061	0.2155	0.1943	0.2078	0.2013	0.2052
60657	2.8	79638	Northside	0.1468	0.1584	0.1320	0.1772	0.1527	0.1534
60659	8.9	48104	Northside	0.2011	0.1877	0.1745	0.1960	0.2124	0.1944
60660	15.7	41412	Northside	0.1810	0.1785	0.1572	0.1807	0.1835	0.1764
60661	6.9	98882	Northside	0.1555	0.1640	0.1236	0.1620	0.1361	0.1488
60706	0.7	52429	Northside	0.1543	0.1478	0.1352	0.1497	0.1798	0.1542
60707	16.5	54669	Northside	0.1215	0.1409	0.1116	0.1455	0.1372	0.1315
х	х	х	34 Zip Codes	0.1413	0.1460	0.1264	0.1542	0.1443	0.1426
X	х	х	Chicago	0.1317	0.1392	0.1217	0.1464	0.1361	0.1352
x	x	x	Difference	0.0096	0.0068	0.0047	0.0078	0.0082	0.0074

2012 2013 2014 2015 2016 2012-16 Zip Race Income Location 102254 0.0741 0.0801 0.0845 60601 6.8 Northside 0.0775 0.1030 0.0900 60602 11.1 57368 Northside 0.1159 0.0742 0.0705 0.0793 0.0632 0.0824 2.8 122031 0.1349 0.1280 0.0870 0.0964 0.0745 0.1049 60603 Northside 7.4 151731 0.0509 0.0705 0.0554 0.0776 0.0570 60604 Northside 0.0620 18.6 60605 87668 Southside 0.1017 0.0966 0.0866 0.1237 0.0953 0.1011 60606 4.3 106661 Northside 0.0744 0.0844 0.0688 0.0679 0.0734 0.0742 60607 16.3 85917 0.0730 0.0831 0.0710 0.1037 0.0860 0.0832 Southside 18.2 0.0523 0.0618 0.0614 0.0592 60608 36216 Southside 0.0548 0.0656 28.9 32284 60609 0.0506 0.0667 0.0624 0.0664 0.0567 0.0608 Southside 18.2 75892 0.0879 0.1019 0.0872 0.1179 0.0974 0.0985 60610 Northside 60611 4.4 87280 Northside 0.0801 0.0768 0.0831 0.1053 0.0974 0.0877 60612 61.7 35888 Northside 0.0665 0.0788 0.0816 0.0830 0.0779 0.0777 60613 7.8 72126 Northside 0.0811 0.0856 0.0803 0.1086 0.1002 0.0911 3.9 92714 0.0909 60614 Northside 0.0804 0.0853 0.1123 0.0929 0.0918 62.0 41108 0.0765 0.0893 0.0888 0.1004 0.0938 0.0900 60615 Southside 42594 26.0 0.1363 0.1025 0.0874 0.1184 0.0983 0.1093 60616 Southside 37796 60617 56.2 Southside 0.0729 0.0811 0.0811 0.0933 0.0799 0.0818 60618 3.5 57500 Northside 0.0683 0.0851 0.0775 0.0924 0.0896 0.0827 60619 97.4 32239 Southside 0.0761 0.0903 0.0865 0.1003 0.0864 0.0883 0.0740 0.0844 60620 98.1 32168 Southside 0.0891 0.0943 0.0831 0.0853 60621 97.9 19832 Southside 0.0572 0.0712 0.0716 0.0712 0.0718 0.0687 0.0613 60622 8.3 75163 Northside 0.0623 0.0648 0.0838 0.0736 0.0689 60623 33.5 28091 0.0362 0.0478 0.0432 0.0567 0.0444 0.0457 Southside 60624 95.3 22204 Northside 0.0476 0.0626 0.0638 0.0733 0.0676 0.0633 60625 4.7 56507 Northside 0.0827 0.0807 0.0790 0.0950 0.0869 0.0849 60626 25.9 36439 Northside 0.1015 0.1049 0.0907 0.1146 0.1157 0.1053 60628 94.7 36242 Southside 0.0672 0.0804 0.0824 0.0938 0.0850 0.0819 60629 23.0 40712 0.0436 0.0583 0.0474 0.0611 0.0525 0.0526 Southside 1.4 62244 0.0918 0.0891 0.1036 0.0945 60630 Northside 0.0862 0.1021 60631 0.5 76400 Northside 0.1024 0.1036 0.0810 0.1190 0.0911 0.0994 60632 2.1 38438 Southside 0.0340 0.0408 0.0356 0.0504 0.0445 0.0408

E. Successful Appeals Rate (x100), By All 59 City of Chicago Zip Codes, 2012 to 2016

60633	4.8	47136	Southside	0.0911	0.1056	0.0957	0.1076	0.1016	0.1005
60634	1.4	56382	Northside	0.0733	0.0754	0.0698	0.0879	0.0742	0.0762
60636	96.3	27871	Southside	0.0606	0.0701	0.0663	0.0789	0.0673	0.0689
60637	78.6	26845	Southside	0.0684	0.0802	0.0846	0.0962	0.0848	0.0831
60638	4.0	62511	Southside	0.0838	0.0871	0.0620	0.0908	0.0751	0.0799
60639	16.6	38798	Northside	0.0470	0.0615	0.0559	0.0618	0.0539	0.0561
60640	18.1	47631	Northside	0.0929	0.0966	0.0914	0.1215	0.1127	0.1030
60641	2.8	51597	Northside	0.0745	0.0792	0.0728	0.0828	0.0839	0.0787
60642	11.0	79633	Southside	0.0684	0.0787	0.0653	0.0927	0.0733	0.0757
60643	74.5	59593	Southside	0.0773	0.0886	0.0807	0.0888	0.0810	0.0835
60644	94.3	26882	Northside	0.0541	0.0786	0.0806	0.0884	0.0715	0.0756
60645	14.9	47633	Northside	0.1148	0.1144	0.1123	0.1227	0.1238	0.1176
60646	0.8	73246	Northside	0.1009	0.0987	0.0875	0.1032	0.1044	0.0989
60647	7.4	56257	Northside	0.0592	0.0673	0.0598	0.0765	0.0676	0.0660
60649	95.5	26797	Southside	0.0724	0.0816	0.0806	0.0926	0.0782	0.0814
60651	63.7	32006	Northside	0.0486	0.0708	0.0668	0.0767	0.0686	0.0667
60652	45.8	61797	Southside	0.0647	0.0760	0.0680	0.0801	0.0734	0.0726
60653	93.8	25923	Southside	0.0690	0.0810	0.0783	0.0897	0.0821	0.0803
60654	7.3	90520	Northside	0.0805	0.0802	0.0732	0.0970	0.0822	0.0824
60655	7.7	87105	Southside	0.0787	0.0948	0.0910	0.0975	0.0818	0.0889
60656	1.8	57308	Northside	0.1462	0.1479	0.1426	0.1468	0.1489	0.1466
60657	2.8	79638	Northside	0.0779	0.0848	0.0767	0.1103	0.0917	0.0879
60659	8.9	48104	Northside	0.1358	0.1234	0.1217	0.1373	0.1539	0.1345
60660	15.7	41412	Northside	0.1174	0.1103	0.1052	0.1245	0.1235	0.1161
60661	6.9	98882	Northside	0.0796	0.0893	0.0761	0.0973	0.0808	0.0847
60706	0.7	52429	Northside	0.1058	0.0893	0.0946	0.1043	0.1372	0.1071
60707	16.5	54669	Northside	0.0778	0.0907	0.0733	0.0973	0.0921	0.0863
60827	96.8	31063	Southside	0.0740	0.0764	0.0798	0.0822	0.0728	0.0773
х	х	х	Chicago	0.0788	0.0847	0.0782	0.0943	0.0853	0.0844
L									

Zip	Race	Income	Location	2012	2013	2014	2015	2016	2012-2016
60612	61.7	35888	Northside	0.0665	0.0788	0.0816	0.0830	0.0779	0.0777
60615	62.0	41108	Southside	0.0765	0.0893	0.0888	0.1004	0.0938	0.0900
60617	56.2	37796	Southside	0.0729	0.0811	0.0811	0.0933	0.0799	0.0818
60619	97.4	32239	Southside	0.0761	0.0903	0.0865	0.1003	0.0864	0.0883
60620	98.1	32168	Southside	0.0740	0.0891	0.0844	0.0943	0.0831	0.0853
60621	97.9	19832	Southside	0.0572	0.0712	0.0716	0.0712	0.0718	0.0687
60624	95.3	22204	Northside	0.0476	0.0626	0.0638	0.0733	0.0676	0.0633
60628	94.7	36242	Southside	0.0672	0.0804	0.0824	0.0938	0.0850	0.0819
60636	96.3	27871	Southside	0.0606	0.0701	0.0663	0.0789	0.0673	0.0689
60637	78.6	26845	Southside	0.0684	0.0802	0.0846	0.0962	0.0848	0.0831
60643	74.5	59593	Southside	0.0773	0.0886	0.0807	0.0888	0.0810	0.0835
60644	94.3	26882	Northside	0.0541	0.0786	0.0806	0.0884	0.0715	0.0756
60649	95.5	26797	Southside	0.0724	0.0816	0.0806	0.0926	0.0782	0.0814
60651	63.7	32006	Northside	0.0486	0.0708	0.0668	0.0767	0.0686	0.0667
60653	93.8	25923	Southside	0.0690	0.0810	0.0783	0.0897	0.0821	0.0803
60827	96.8	31063	Southside	0.0740	0.0764	0.0798	0.0822	0.0728	0.0773
х	х	х	16 Zip Codes	0.0664	0.0794	0.0786	0.0877	0.0782	0.0783
х	х	х	Chicago	0.0788	0.0847	0.0782	0.0943	0.0853	0.0844
х	х	х	Difference	-0.0124	-0.0053	0.0004	-0.0066	-0.0071	-0.0061

1. Successful Appeals Rate (x100), By 16 Majority-Black Zip Codes (RACE), 2012 to 2016

2. Successful Appeals Rate (x100), By 43 Majority-Other Zip Codes (RACE), 2012 to 2016

Zip	Race	Income	Location	2012	2013	2014	2015	2016	2012-2016
60601	6.8	102254	Northside	0.0741	0.0801	0.0775	0.1030	0.0900	0.0845
60602	11.1	57368	Northside	0.1159	0.0742	0.0705	0.0793	0.0632	0.0824
60603	2.8	122031	Northside	0.1349	0.1280	0.0870	0.0964	0.0745	0.1049
60604	7.4	151731	Northside	0.0509	0.0705	0.0554	0.0776	0.0570	0.0620
60605	18.6	87668	Southside	0.1017	0.0966	0.0866	0.1237	0.0953	0.1011
60606	4.3	106661	Northside	0.0744	0.0844	0.0688	0.0679	0.0734	0.0742
60607	16.3	85917	Southside	0.0730	0.0831	0.0710	0.1037	0.0860	0.0832

60609 28.9 32284 Southside 0.0506 0.0667 0.0624 0.0664 0.0567 0.0088 60610 18.2 75892 Northside 0.0879 0.1019 0.0872 0.1179 0.0974 0.0985 60611 4.4 87200 Northside 0.0811 0.0565 0.0803 0.1086 0.1002 0.0911 60613 7.8 72126 Northside 0.0804 0.0990 0.0853 0.1123 0.0920 0.0911 60616 2.60 42594 Southside 0.1633 0.0123 0.0841 0.1184 0.0983 0.1093 60618 3.5 57500 Northside 0.0632 0.0443 0.0611 0.0383 0.0757 0.0444 0.0467 60623 3.5 28091 Southside 0.0627 0.0807 0.1146 0.1157 0.1033 60629 23.0 40712 Southside 0.0418 0.0491 0.0611 0.0552 0.0526	60608	18.2	36216	Southside	0.0523	0.0618	0.0548	0.0656	0.0614	0.0592
66610 18.2 75992 Northside 0.0879 0.1019 0.0872 0.1179 0.0974 0.0981 00611 4.4 87280 Northside 0.0801 0.0768 0.0831 0.1053 0.0974 0.0877 60613 7.8 72126 Northside 0.0811 0.0866 0.0803 0.1086 0.1002 0.0911 60614 3.9 92714 Northside 0.0804 0.0909 0.0833 0.112 0.0920 0.0918 60616 26.0 42594 Southside 0.1623 0.0871 0.1184 0.0924 0.0896 0.0827 60623 3.3 75163 Northside 0.0362 0.0478 0.0432 0.0667 0.0444 0.0417 60625 4.7 56507 Northside 0.0105 0.0493 0.0474 0.0611 0.0526 60631 0.5 76400 Northside 0.0104 0.0697 0.1016 0.1012 60633 4.8	60609	28.9	32284	Southside	0.0506	0.0667	0.0624	0.0664	0.0567	0.0608
60611 4.4 87280 Northside 0.0801 0.0768 0.0831 0.1033 0.0974 0.0877 60613 7.8 72126 Northside 0.0811 0.0856 0.0803 0.1086 0.1002 0.0911 60614 3.9 92714 Northside 0.0804 0.0909 0.0853 0.1123 0.0929 0.0918 60616 26.0 42594 Southside 0.1363 0.025 0.0874 0.1184 0.0929 0.0918 60618 3.5 75700 Northside 0.0633 0.0851 0.0775 0.0924 0.0896 0.0827 60623 3.3.5 28091 Southside 0.0362 0.0478 0.0432 0.0567 0.0444 0.0457 60624 2.5.9 36439 Northside 0.015 0.1049 0.0907 0.1146 0.1157 0.1035 60630 1.4 6224 Northside 0.0361 0.0106 0.0121 0.0526 60652	60610	18.2	75892	Northside	0.0879	0.1019	0.0872	0.1179	0.0974	0.0985
60613 7.8 72126 Northside 0.0811 0.0856 0.0803 0.1086 0.1002 0.0911 60614 3.9 92714 Northside 0.0804 0.0909 0.0853 0.1123 0.0929 0.0918 60616 26.0 42594 Southside 0.1363 0.1025 0.0874 0.1184 0.0923 0.0933 0.1033 60618 3.5 57500 Northside 0.0623 0.0648 0.0613 0.0838 0.0736 0.0889 60623 3.3.5 28091 Southside 0.0322 0.0478 0.0432 0.0557 0.0444 0.0457 60625 4.7 55507 Northside 0.1015 0.1049 0.0907 0.1146 0.1157 0.1053 60626 25.9 36439 Northside 0.0124 0.1036 0.0480 0.0156 0.1021 0.0994 60631 0.5 76400 Northside 0.024 0.1036 0.10810 0.1190 0.0191	60611	4.4	87280	Northside	0.0801	0.0768	0.0831	0.1053	0.0974	0.0877
60614 3.9 92714 Northside 0.0804 0.0999 0.0853 0.1123 0.0929 0.0918 60616 26.0 42594 Southside 0.1363 0.1025 0.0874 0.1184 0.0983 0.1093 60618 3.5 57500 Northside 0.0633 0.0613 0.0924 0.0896 0.0897 60623 33.5 28091 Southside 0.0627 0.0478 0.0432 0.057 0.0444 0.0457 60623 3.5 28091 Southside 0.032 0.0478 0.0432 0.057 0.0444 0.0457 60625 4.7 55597 Northside 0.015 0.1049 0.0907 0.1146 0.1157 0.0532 60626 25.9 36439 Northside 0.0191 0.0807 0.0114 0.0156 0.1146 0.1157 0.0526 60630 1.4 62244 Northside 0.0811 0.0612 0.1036 0.1021 0.0994	60613	7.8	72126	Northside	0.0811	0.0856	0.0803	0.1086	0.1002	0.0911
60616 26.0 42594 Southside 0.1363 0.1025 0.0874 0.1184 0.0983 0.1093 60618 3.5 57500 Northside 0.0683 0.0851 0.0775 0.0924 0.0896 0.0887 60622 8.3 75163 Northside 0.0623 0.0448 0.0432 0.0567 0.0444 0.0457 60625 4.7 56507 Northside 0.0827 0.0807 0.0790 0.0950 0.0869 0.0849 60626 25.9 36439 Northside 0.015 0.1049 0.0907 0.1146 0.1157 0.1053 60629 23.0 40712 Southside 0.0124 0.0363 0.0474 0.0611 0.0525 0.0526 60631 0.5 76400 Northside 0.024 0.0368 0.0810 0.1190 0.0911 0.0954 60633 4.8 47136 Southside 0.0733 0.0754 0.0698 0.0879 0.0742 0.0762 <td>60614</td> <td>3.9</td> <td>92714</td> <td>Northside</td> <td>0.0804</td> <td>0.0909</td> <td>0.0853</td> <td>0.1123</td> <td>0.0929</td> <td>0.0918</td>	60614	3.9	92714	Northside	0.0804	0.0909	0.0853	0.1123	0.0929	0.0918
60618 3.5 57500 Northside 0.0683 0.0871 0.0775 0.0924 0.0896 0.0897 60622 8.3 75163 Northside 0.0623 0.0648 0.0613 0.0838 0.0736 0.0489 60623 33.5 28091 Southside 0.0322 0.0478 0.0432 0.0567 0.0444 0.0437 60625 4.7 56507 Northside 0.0827 0.0807 0.0790 0.0950 0.0869 0.0849 60626 25.9 36439 Northside 0.015 0.1049 0.0907 0.1146 0.1157 0.1053 60629 23.0 40712 Southside 0.024 0.0383 0.0474 0.0611 0.0525 0.0526 60630 1.4 62244 Northside 0.0918 0.0891 0.0862 0.1026 0.0911 0.0994 60633 4.8 47136 Southside 0.0911 0.1056 0.0557 0.1076 0.1016 0.1005 <td>60616</td> <td>26.0</td> <td>42594</td> <td>Southside</td> <td>0.1363</td> <td>0.1025</td> <td>0.0874</td> <td>0.1184</td> <td>0.0983</td> <td>0.1093</td>	60616	26.0	42594	Southside	0.1363	0.1025	0.0874	0.1184	0.0983	0.1093
60622 8.3 75163 Northside 0.0623 0.0648 0.0613 0.0838 0.0736 0.0689 60623 33.5 28091 Southside 0.0362 0.0478 0.0432 0.0567 0.0444 0.0437 60625 4.7 56507 Northside 0.0827 0.0807 0.0790 0.0950 0.0869 0.0849 60626 25.9 36439 Northside 0.0115 0.1049 0.0907 0.1146 0.1157 0.1053 60629 23.0 40712 Southside 0.0436 0.0583 0.0474 0.0611 0.0525 0.0526 60630 1.4 62244 Northside 0.0102 0.1036 0.0810 0.1190 0.0911 0.0954 60633 4.8 47136 Southside 0.0911 0.1056 0.0957 0.1076 0.1016 0.1005 60634 1.4 56382 Northside 0.0733 0.0754 0.0698 0.0751 0.0762	60618	3.5	57500	Northside	0.0683	0.0851	0.0775	0.0924	0.0896	0.0827
60623 33.5 28091 Southside 0.0362 0.0478 0.0432 0.0567 0.0444 0.0457 60625 4.7 56507 Northside 0.0827 0.0807 0.0790 0.0950 0.0869 0.0849 60625 25.9 36439 Northside 0.1015 0.1049 0.0907 0.1146 0.1157 0.1053 60629 23.0 40712 Southside 0.0436 0.0583 0.0474 0.0611 0.0525 0.0526 60630 1.4 62244 Northside 0.0918 0.0891 0.0862 0.1036 0.1021 0.0945 60631 0.5 76400 Northside 0.1024 0.1036 0.0501 0.1016 0.1021 0.0954 60633 4.8 47136 Southside 0.0911 0.1056 0.0597 0.1076 0.1016 0.1055 60634 1.4 56382 Northside 0.0470 0.0615 0.0598 0.0618 0.0539 0.0561<	60622	8.3	75163	Northside	0.0623	0.0648	0.0613	0.0838	0.0736	0.0689
60625 4.7 56507 Northside 0.0827 0.0807 0.0790 0.0950 0.0869 0.0849 60626 25.9 36439 Northside 0.1015 0.1049 0.0907 0.1146 0.1157 0.1053 60629 23.0 40712 Southside 0.0436 0.0583 0.0474 0.0611 0.0525 0.0526 60630 1.4 62244 Northside 0.024 0.1036 0.0810 0.1190 0.0911 0.0994 60631 0.5 76400 Northside 0.024 0.1036 0.0810 0.1190 0.0911 0.0935 60633 4.8 47136 Southside 0.0911 0.1056 0.0597 0.1076 0.1016 0.1005 60634 1.4 56382 Northside 0.0733 0.0754 0.0698 0.0879 0.0712 0.0762 60639 16.6 38798 Northside 0.0470 0.0615 0.0559 0.0618 0.0539 0.0751 <td>60623</td> <td>33.5</td> <td>28091</td> <td>Southside</td> <td>0.0362</td> <td>0.0478</td> <td>0.0432</td> <td>0.0567</td> <td>0.0444</td> <td>0.0457</td>	60623	33.5	28091	Southside	0.0362	0.0478	0.0432	0.0567	0.0444	0.0457
60626 25.9 36439 Northside 0.1015 0.1049 0.0907 0.1146 0.1157 0.1053 60629 23.0 40712 Southside 0.0436 0.0583 0.0474 0.0611 0.0525 0.0526 60630 1.4 62244 Northside 0.0918 0.0891 0.0862 0.1036 0.1021 0.0994 60631 0.5 76400 Northside 0.1024 0.1036 0.0810 0.1190 0.0911 0.0994 60632 2.1 38438 Southside 0.0911 0.1056 0.0957 0.1076 0.1016 0.1005 60633 4.8 47136 Southside 0.0911 0.1056 0.0957 0.1076 0.1016 0.1005 60634 1.4 56382 Northside 0.0733 0.0754 0.0698 0.0879 0.0712 0.0762 60639 16.6 38798 Northside 0.0817 0.0620 0.0908 0.0751 0.0791 0.1030<	60625	4.7	56507	Northside	0.0827	0.0807	0.0790	0.0950	0.0869	0.0849
60629 23.0 40712 Southside 0.0436 0.0583 0.0474 0.0611 0.0525 0.0526 60630 1.4 62244 Northside 0.0918 0.0891 0.0862 0.1036 0.1021 0.0945 60631 0.5 76400 Northside 0.1024 0.1036 0.0810 0.1190 0.0911 0.0994 60632 2.1 38438 Southside 0.0340 0.0408 0.0356 0.0504 0.0445 0.0408 60633 4.8 47136 Southside 0.0911 0.1056 0.0957 0.1076 0.1016 0.1005 60634 1.4 56382 Northside 0.0733 0.0754 0.0698 0.0879 0.0742 0.0762 60638 4.0 62511 Southside 0.0470 0.0615 0.0559 0.0618 0.0539 0.0561 60640 18.1 47631 Northside 0.0787 0.0653 0.0927 0.0733 0.0787	60626	25.9	36439	Northside	0.1015	0.1049	0.0907	0.1146	0.1157	0.1053
60630 1.4 62244 Northside 0.0918 0.0891 0.0862 0.1036 0.1021 0.0945 60631 0.5 76400 Northside 0.1024 0.1036 0.0810 0.1190 0.0911 0.0994 60632 2.1 38438 Southside 0.0340 0.0408 0.0356 0.0504 0.0445 0.0408 60632 2.1 38438 Southside 0.0911 0.1056 0.0957 0.1076 0.1016 0.1005 60634 1.4 56382 Northside 0.0733 0.0754 0.0698 0.0879 0.0742 0.0762 60638 4.0 62511 Southside 0.0838 0.0871 0.0620 0.9908 0.0751 0.0799 60640 18.1 47631 Northside 0.0752 0.0728 0.0828 0.0839 0.0757 60642 11.0 79633 Southside 0.1148 0.1144 0.1123 0.1227 0.1238 0.1176	60629	23.0	40712	Southside	0.0436	0.0583	0.0474	0.0611	0.0525	0.0526
60631 0.5 76400 Northside 0.1024 0.1036 0.0810 0.1190 0.0911 0.0994 60632 2.1 38438 Southside 0.0340 0.0408 0.0356 0.0504 0.0445 0.0408 60633 4.8 47136 Southside 0.0911 0.1056 0.0957 0.1076 0.1016 0.1005 60634 1.4 56382 Northside 0.0733 0.0754 0.0698 0.0879 0.0742 0.0762 60638 4.0 62511 Southside 0.0838 0.0871 0.0620 0.0908 0.0751 0.0799 60639 16.6 38798 Northside 0.0470 0.0615 0.0559 0.0618 0.0539 0.0561 60640 18.1 47631 Northside 0.0745 0.0792 0.0728 0.0828 0.0839 0.0787 60642 11.0 79633 Southside 0.1049 0.0787 0.0653 0.0927 0.0733 0.0757<	60630	1.4	62244	Northside	0.0918	0.0891	0.0862	0.1036	0.1021	0.0945
60632 2.1 38438 Southside 0.0340 0.0408 0.0356 0.0504 0.0445 0.0408 60633 4.8 47136 Southside 0.0911 0.1056 0.0957 0.1076 0.1016 0.1005 60633 1.4 56382 Northside 0.0733 0.0754 0.0698 0.0879 0.0742 0.0762 60638 4.0 62511 Southside 0.0838 0.0871 0.0620 0.0908 0.0751 0.0799 60639 16.6 38798 Northside 0.0470 0.0615 0.0559 0.0618 0.0539 0.0561 60640 18.1 47631 Northside 0.0745 0.0792 0.0728 0.0828 0.0839 0.0787 60641 2.8 51597 Northside 0.1079 0.0653 0.0927 0.0733 0.0751 60645 14.9 47633 Northside 0.1099 0.0987 0.0875 0.1032 0.1044 0.0989	60631	0.5	76400	Northside	0.1024	0.1036	0.0810	0.1190	0.0911	0.0994
60633 4.8 47136 Southside 0.0911 0.1056 0.0957 0.1076 0.1016 0.1005 60634 1.4 56382 Northside 0.0733 0.0754 0.0698 0.0879 0.0742 0.0762 60638 4.0 62511 Southside 0.0838 0.0871 0.0620 0.0908 0.0751 0.0799 60639 16.6 38798 Northside 0.0470 0.0615 0.0559 0.0618 0.0539 0.0561 60640 18.1 47631 Northside 0.0929 0.0966 0.0914 0.1215 0.1127 0.1030 60641 2.8 51597 Northside 0.0745 0.0787 0.0653 0.0927 0.0733 0.0757 60642 11.0 79633 Southside 0.1148 0.1144 0.1123 0.1227 0.1238 0.1176 60646 0.8 73246 Northside 0.1099 0.0987 0.0875 0.1032 0.1044 0.0986<	60632	2.1	38438	Southside	0.0340	0.0408	0.0356	0.0504	0.0445	0.0408
606341.456382Northside0.07330.07540.06980.08790.07420.0762606384.062511Southside0.08380.08710.06200.09080.07510.07996063916.638798Northside0.04700.06150.05590.06180.05390.05616064018.147631Northside0.09290.09660.09140.12150.11270.1030606412.851597Northside0.07450.07920.07280.08280.08390.07876064211.079633Southside0.06840.07870.06530.09270.07330.07576064514.947633Northside0.11480.11440.11230.12270.12380.1176606460.873246Northside0.05920.06730.05980.07650.06760.06606065245.861797Southside0.08050.08020.07320.09700.08220.0824606547.390520Northside0.07870.09480.09100.09750.08180.0889606557.787105Southside0.07790.08480.07670.11030.09170.0879606557.879638Northside0.07990.08480.07670.11030.09170.0879606561.857308Northside0.1740.11330.12350.13450.12350.1345 <td>60633</td> <td>4.8</td> <td>47136</td> <td>Southside</td> <td>0.0911</td> <td>0.1056</td> <td>0.0957</td> <td>0.1076</td> <td>0.1016</td> <td>0.1005</td>	60633	4.8	47136	Southside	0.0911	0.1056	0.0957	0.1076	0.1016	0.1005
60638 4.0 62511 Southside 0.0838 0.0871 0.0620 0.0908 0.0751 0.0799 60639 16.6 38798 Northside 0.0470 0.0615 0.0559 0.0618 0.0539 0.0561 60640 18.1 47631 Northside 0.0929 0.0966 0.0914 0.1215 0.1127 0.1030 60641 2.8 51597 Northside 0.0745 0.0792 0.0728 0.0828 0.0839 0.0757 60642 11.0 79633 Southside 0.0684 0.0787 0.0653 0.0927 0.0733 0.0757 60645 14.9 47633 Northside 0.1148 0.1144 0.1123 0.1227 0.1238 0.1176 60646 0.8 73246 Northside 0.1009 0.0987 0.0875 0.1032 0.1044 0.0989 60652 45.8 61797 Southside 0.0647 0.0760 0.0860 0.0801 0.0734 0.072	60634	1.4	56382	Northside	0.0733	0.0754	0.0698	0.0879	0.0742	0.0762
60639 16.6 38798 Northside 0.0470 0.0615 0.0559 0.0618 0.0539 0.0561 60640 18.1 47631 Northside 0.0929 0.0966 0.0914 0.1215 0.1127 0.1030 60641 2.8 51597 Northside 0.0745 0.0792 0.0728 0.0828 0.0839 0.0787 60642 11.0 79633 Southside 0.0684 0.0787 0.0653 0.0927 0.0733 0.0757 60645 14.9 47633 Northside 0.1148 0.1144 0.1123 0.1227 0.1238 0.1176 60646 0.8 73246 Northside 0.1099 0.0987 0.0875 0.1032 0.1044 0.0989 60647 7.4 56257 Northside 0.0673 0.0598 0.0765 0.0676 0.0660 60654 7.3 90520 Northside 0.0805 0.0802 0.0732 0.0970 0.0822 0.0824	60638	4.0	62511	Southside	0.0838	0.0871	0.0620	0.0908	0.0751	0.0799
6064018.147631Northside0.09290.09660.09140.12150.11270.1030606412.851597Northside0.07450.07920.07280.08280.08390.07876064211.079633Southside0.06840.07870.06530.09270.07330.07576064514.947633Northside0.11480.11440.11230.12270.12380.1176606460.873246Northside0.10090.09870.08750.10320.10440.0989606477.456257Northside0.05920.06730.05980.07650.06760.06606065245.861797Southside0.08050.08020.07320.09700.08220.0824606557.787105Southside0.07870.09480.09100.09750.08180.0889606561.857308Northside0.07790.08480.07670.11030.09170.0879606598.948104Northside0.13580.12340.12170.13730.15390.13456066015.741412Northside0.11740.11030.07610.09730.08080.0847	60639	16.6	38798	Northside	0.0470	0.0615	0.0559	0.0618	0.0539	0.0561
606412.851597Northside0.07450.07920.07280.08280.08390.07876064211.079633Southside0.06840.07870.06530.09270.07330.07576064514.947633Northside0.11480.11440.11230.12270.12380.1176606460.873246Northside0.10090.09870.08750.10320.10440.0989606477.456257Northside0.05920.06730.05980.07650.06760.06606065245.861797Southside0.06470.07600.06800.08010.07340.0726606547.390520Northside0.07870.09480.09100.09750.08180.0889606557.787105Southside0.14620.14790.14260.14680.14890.1466606572.879638Northside0.07790.08480.07670.11030.09170.0879606598.948104Northside0.13580.12340.12170.13730.15390.13456066015.741412Northside0.11740.11030.09230.07610.09730.08080.0847	60640	18.1	47631	Northside	0.0929	0.0966	0.0914	0.1215	0.1127	0.1030
6064211.079633Southside0.06840.07870.06530.09270.07330.07576064514.947633Northside0.11480.11440.11230.12270.12380.1176606460.873246Northside0.10090.09870.08750.10320.10440.0989606477.456257Northside0.05920.06730.05980.07650.06760.06606065245.861797Southside0.06470.07600.06800.08010.07340.0726606547.390520Northside0.07870.09480.09100.09750.08180.0889606557.787105Southside0.014620.14790.14260.14680.14890.1466606572.879638Northside0.07790.08480.07670.11030.09170.0879606598.948104Northside0.13580.12340.12170.13730.15390.13456066015.741412Northside0.11740.11030.07610.09730.08080.0847	60641	2.8	51597	Northside	0.0745	0.0792	0.0728	0.0828	0.0839	0.0787
6064514.947633Northside0.11480.11440.11230.12270.12380.1176606460.873246Northside0.10090.09870.08750.10320.10440.0989606477.456257Northside0.05920.06730.05980.07650.06760.06606065245.861797Southside0.06470.07600.06800.08010.07340.0726606547.390520Northside0.07870.09480.09100.09750.08180.0889606557.787105Southside0.14620.14790.14260.14680.14890.1466606572.879638Northside0.07790.08480.07670.11030.09170.0879606598.948104Northside0.13580.12340.12170.13730.15390.13456066015.741412Northside0.1740.10330.07610.09730.08080.0847	60642	11.0	79633	Southside	0.0684	0.0787	0.0653	0.0927	0.0733	0.0757
606460.873246Northside0.10090.09870.08750.10320.10440.0989606477.456257Northside0.05920.06730.05980.07650.06760.06606065245.861797Southside0.06470.07600.06800.08010.07340.0726606547.390520Northside0.08050.08020.07320.09700.08220.0824606557.787105Southside0.07870.09480.09100.09750.08180.0889606561.857308Northside0.14620.14790.14260.14680.14890.1466606572.879638Northside0.07790.08480.07670.11030.09170.0879606598.948104Northside0.11740.11030.10520.12450.12350.1161606616.99882Northside0.07960.08930.07610.09730.08080.0847	60645	14.9	47633	Northside	0.1148	0.1144	0.1123	0.1227	0.1238	0.1176
606477.456257Northside0.05920.06730.05980.07650.06760.06606065245.861797Southside0.06470.07600.06800.08010.07340.0726606547.390520Northside0.08050.08020.07320.09700.08220.0824606557.787105Southside0.07870.09480.09100.09750.08180.0889606561.857308Northside0.14620.14790.14260.14680.14890.1466606572.879638Northside0.07790.08480.07670.11030.09170.0879606598.948104Northside0.13580.12340.12170.13730.15390.13456066015.741412Northside0.07960.08930.07610.09730.08080.0847	60646	0.8	73246	Northside	0.1009	0.0987	0.0875	0.1032	0.1044	0.0989
6065245.861797Southside0.06470.07600.06800.08010.07340.0726606547.390520Northside0.08050.08020.07320.09700.08220.0824606557.787105Southside0.07870.09480.09100.09750.08180.0889606561.857308Northside0.14620.14790.14260.14680.14890.1466606572.879638Northside0.07790.08480.07670.11030.09170.0879606598.948104Northside0.13580.12340.12170.13730.15390.13456066015.741412Northside0.017960.08930.07610.09730.08080.0847	60647	7.4	56257	Northside	0.0592	0.0673	0.0598	0.0765	0.0676	0.0660
606547.390520Northside0.08050.08020.07320.09700.08220.0824606557.787105Southside0.07870.09480.09100.09750.08180.0889606561.857308Northside0.14620.14790.14260.14680.14890.1466606572.879638Northside0.07790.08480.07670.11030.09170.0879606598.948104Northside0.13580.12340.12170.13730.15390.13456066015.741412Northside0.11740.11030.10520.12450.12350.1161606616.998882Northside0.07960.08930.07610.09730.08080.0847	60652	45.8	61797	Southside	0.0647	0.0760	0.0680	0.0801	0.0734	0.0726
60655 7.7 87105 Southside 0.0787 0.0948 0.0910 0.0975 0.0818 0.0889 60656 1.8 57308 Northside 0.1462 0.1479 0.1426 0.1468 0.1489 0.1466 60657 2.8 79638 Northside 0.0779 0.0848 0.0767 0.1103 0.0917 0.0879 60659 8.9 48104 Northside 0.1358 0.1234 0.1217 0.1373 0.1539 0.1345 60660 15.7 41412 Northside 0.0796 0.0893 0.0761 0.0973 0.0808 0.0847	60654	7.3	90520	Northside	0.0805	0.0802	0.0732	0.0970	0.0822	0.0824
60656 1.8 57308 Northside 0.1462 0.1479 0.1426 0.1468 0.1489 0.1466 60657 2.8 79638 Northside 0.0779 0.0848 0.0767 0.1103 0.0917 0.0879 60659 8.9 48104 Northside 0.1358 0.1234 0.1217 0.1373 0.1539 0.1345 60660 15.7 41412 Northside 0.174 0.1103 0.1052 0.1245 0.1235 0.1161 60661 6.9 98882 Northside 0.0796 0.0893 0.0761 0.0973 0.0808 0.0847	60655	7.7	87105	Southside	0.0787	0.0948	0.0910	0.0975	0.0818	0.0889
60657 2.8 79638 Northside 0.0779 0.0848 0.0767 0.1103 0.0917 0.0879 60659 8.9 48104 Northside 0.1358 0.1234 0.1217 0.1373 0.1539 0.1345 60660 15.7 41412 Northside 0.1174 0.1103 0.1052 0.1245 0.1235 0.1161 60661 6.9 98882 Northside 0.0796 0.0893 0.0761 0.0973 0.0808 0.0847	60656	1.8	57308	Northside	0.1462	0.1479	0.1426	0.1468	0.1489	0.1466
60659 8.9 48104 Northside 0.1358 0.1234 0.1217 0.1373 0.1539 0.1345 60660 15.7 41412 Northside 0.1174 0.1103 0.1052 0.1245 0.1235 0.1161 60661 6.9 98882 Northside 0.0796 0.0893 0.0761 0.0973 0.0808 0.0847	60657	2.8	79638	Northside	0.0779	0.0848	0.0767	0.1103	0.0917	0.0879
60660 15.7 41412 Northside 0.1174 0.1103 0.1052 0.1245 0.1235 0.1161 60661 6.9 98882 Northside 0.0796 0.0893 0.0761 0.0973 0.0808 0.0847	60659	8.9	48104	Northside	0.1358	0.1234	0.1217	0.1373	0.1539	0.1345
60661 6.9 98882 Northside 0.0796 0.0893 0.0761 0.0973 0.0808 0.0847	60660	15.7	41412	Northside	0.1174	0.1103	0.1052	0.1245	0.1235	0.1161
	60661	6.9	98882	Northside	0.0796	0.0893	0.0761	0.0973	0.0808	0.0847

60706	0.7	52429	Northside	0.1058	0.0893	0.0946	0.1043	0.1372	0.1071
60707	16.5	54669	Northside	0.0778	0.0907	0.0733	0.0973	0.0921	0.0863
х	х	Х	43 Zip Codes	0.0834	0.0867	0.0780	0.0968	0.0879	0.0866
х	х	Х	Chicago	0.0788	0.0847	0.0782	0.0943	0.0853	0.0844
X	х	Х	Difference	0.0046	0.0020	-0.0002	0.0025	0.0026	0.0022

3. Successful Appeals Rate (x100), By 28 Lower-Income Zip Codes (INCOME), 2012-16

Zip	Race	Income	Location	2012	2013	2014	2015	2016	2012-2016
60608	18.2	36216	Southside	0.0523	0.0618	0.0548	0.0656	0.0614	0.0592
60609	28.9	32284	Southside	0.0506	0.0667	0.0624	0.0664	0.0567	0.0608
60612	61.7	35888	Northside	0.0665	0.0788	0.0816	0.0830	0.0779	0.0777
60615	62.0	41108	Southside	0.0765	0.0893	0.0888	0.1004	0.0938	0.0900
60616	26.0	42594	Southside	0.1363	0.1025	0.0874	0.1184	0.0983	0.1093
60617	56.2	37796	Southside	0.0729	0.0811	0.0811	0.0933	0.0799	0.0818
60619	97.4	32239	Southside	0.0761	0.0903	0.0865	0.1003	0.0864	0.0883
60620	98.1	32168	Southside	0.0740	0.0891	0.0844	0.0943	0.0831	0.0853
60621	97.9	19832	Southside	0.0572	0.0712	0.0716	0.0712	0.0718	0.0687
60623	33.5	28091	Southside	0.0362	0.0478	0.0432	0.0567	0.0444	0.0457
60624	95.3	22204	Northside	0.0476	0.0626	0.0638	0.0733	0.0676	0.0633
60626	25.9	36439	Northside	0.1015	0.1049	0.0907	0.1146	0.1157	0.1053
60628	94.7	36242	Southside	0.0672	0.0804	0.0824	0.0938	0.0850	0.0819
60629	23.0	40712	Southside	0.0436	0.0583	0.0474	0.0611	0.0525	0.0526
60632	2.1	38438	Southside	0.0340	0.0408	0.0356	0.0504	0.0445	0.0408
60633	4.8	47136	Southside	0.0911	0.1056	0.0957	0.1076	0.1016	0.1005
60636	96.3	27871	Southside	0.0606	0.0701	0.0663	0.0789	0.0673	0.0689
60637	78.6	26845	Southside	0.0684	0.0802	0.0846	0.0962	0.0848	0.0831
60639	16.6	38798	Northside	0.0470	0.0615	0.0559	0.0618	0.0539	0.0561
60640	18.1	47631	Northside	0.0929	0.0966	0.0914	0.1215	0.1127	0.1030
60644	94.3	26882	Northside	0.0541	0.0786	0.0806	0.0884	0.0715	0.0756
60645	14.9	47633	Northside	0.1148	0.1144	0.1123	0.1227	0.1238	0.1176
60649	95.5	26797	Southside	0.0724	0.0816	0.0806	0.0926	0.0782	0.0814
60651	63.7	32006	Northside	0.0486	0.0708	0.0668	0.0767	0.0686	0.0667
60653	93.8	25923	Southside	0.0690	0.0810	0.0783	0.0897	0.0821	0.0803

60659	8.9	48104	Northside	0.1358	0.1234	0.1217	0.1373	0.1539	0.1345
60660	15.7	41412	Northside	0.1174	0.1103	0.1052	0.1245	0.1235	0.1161
60827	96.8	31063	Southside	0.0740	0.0764	0.0798	0.0822	0.0728	0.0773
х	х	х	28 Zip Codes	0.0728	0.0813	0.0779	0.0901	0.0826	0.0811
х	х	х	Chicago	0.0788	0.0847	0.0782	0.0943	0.0853	0.0844
х	х	х	Difference	-0.0060	-0.0034	-0.0003	-0.0042	-0.0027	-0.0033

4. Successful Appeals Rate (x100), By 31 Higher-Income Zip Codes (INCOME), 2012-16

Zip	Race	Income	Location	2012	2013	2014	2015	2016	2012-
									2016
60601	6.8	102254	Northside	0.0741	0.0801	0.0775	0.1030	0.0900	0.0845
60602	11.1	57368	Northside	0.1159	0.0742	0.0705	0.0793	0.0632	0.0824
60603	2.8	122031	Northside	0.1349	0.1280	0.0870	0.0964	0.0745	0.1049
60604	7.4	151731	Northside	0.0509	0.0705	0.0554	0.0776	0.0570	0.0620
60605	18.6	87668	Southside	0.1017	0.0966	0.0866	0.1237	0.0953	0.1011
60606	4.3	106661	Northside	0.0744	0.0844	0.0688	0.0679	0.0734	0.0742
60607	16.3	85917	Southside	0.0730	0.0831	0.0710	0.1037	0.0860	0.0832
60610	18.2	75892	Northside	0.0879	0.1019	0.0872	0.1179	0.0974	0.0985
60611	4.4	87280	Northside	0.0801	0.0768	0.0831	0.1053	0.0974	0.0877
60613	7.8	72126	Northside	0.0811	0.0856	0.0803	0.1086	0.1002	0.0911
60614	3.9	92714	Northside	0.0804	0.0909	0.0853	0.1123	0.0929	0.0918
60618	3.5	57500	Northside	0.0683	0.0851	0.0775	0.0924	0.0896	0.0827
60622	8.3	75163	Northside	0.0623	0.0648	0.0613	0.0838	0.0736	0.0689
60625	4.7	56507	Northside	0.0827	0.0807	0.0790	0.0950	0.0869	0.0849
60630	1.4	62244	Northside	0.0918	0.0891	0.0862	0.1036	0.1021	0.0945
60631	0.5	76400	Northside	0.1024	0.1036	0.0810	0.1190	0.0911	0.0994
60634	1.4	56382	Northside	0.0733	0.0754	0.0698	0.0879	0.0742	0.0762
60638	4.0	62511	Southside	0.0838	0.0871	0.0620	0.0908	0.0751	0.0799
60641	2.8	51597	Northside	0.0745	0.0792	0.0728	0.0828	0.0839	0.0787
60642	11.0	79633	Southside	0.0684	0.0787	0.0653	0.0927	0.0733	0.0757
60643	74.5	59593	Southside	0.0773	0.0886	0.0807	0.0888	0.0810	0.0835
60646	0.8	73246	Northside	0.1009	0.0987	0.0875	0.1032	0.1044	0.0989
60647	7.4	56257	Northside	0.0592	0.0673	0.0598	0.0765	0.0676	0.0660

60652	45.8	61797	Southside	0.0647	0.0760	0.0680	0.0801	0.0734	0.0726
60654	7.3	90520	Northside	0.0805	0.0802	0.0732	0.0970	0.0822	0.0824
60655	7.7	87105	Southside	0.0787	0.0948	0.0910	0.0975	0.0818	0.0889
60656	1.8	57308	Northside	0.1462	0.1479	0.1426	0.1468	0.1489	0.1466
60657	2.8	79638	Northside	0.0779	0.0848	0.0767	0.1103	0.0917	0.0879
60661	6.9	98882	Northside	0.0796	0.0893	0.0761	0.0973	0.0808	0.0847
60706	0.7	52429	Northside	0.1058	0.0893	0.0946	0.1043	0.1372	0.1071
60707	16.5	54669	Northside	0.0778	0.0907	0.0733	0.0973	0.0921	0.0863
x	х	х	31 Zip Codes	0.0842	0.0879	0.0784	0.0982	0.0877	0.0873
x	х	х	Chicago	0.0788	0.0847	0.0782	0.0943	0.0853	0.0844
x	x	x	Difference	0.0054	0.0032	0.0002	0.0039	0.0024	0.0029

5. Successful Appeals Rate (x100), By 25 Southside Zip Codes (LOCATION), 2012-2016

Zip	Race	Income	Location	2012	2013	2014	2015	2016	2012-16
60605	18.6	87668	Southside	0.1017	0.0966	0.0866	0.1237	0.0953	0.1011
60607	16.3	85917	Southside	0.0730	0.0831	0.0710	0.1037	0.0860	0.0832
60608	18.2	36216	Southside	0.0523	0.0618	0.0548	0.0656	0.0614	0.0592
60609	28.9	32284	Southside	0.0506	0.0667	0.0624	0.0664	0.0567	0.0608
60615	62.0	41108	Southside	0.0765	0.0893	0.0888	0.1004	0.0938	0.0900
60616	26.0	42594	Southside	0.1363	0.1025	0.0874	0.1184	0.0983	0.1093
60617	56.2	37796	Southside	0.0729	0.0811	0.0811	0.0933	0.0799	0.0818
60619	97.4	32239	Southside	0.0761	0.0903	0.0865	0.1003	0.0864	0.0883
60620	98.1	32168	Southside	0.0740	0.0891	0.0844	0.0943	0.0831	0.0853
60621	97.9	19832	Southside	0.0572	0.0712	0.0716	0.0712	0.0718	0.0687
60623	33.5	28091	Southside	0.0362	0.0478	0.0432	0.0567	0.0444	0.0457
60628	94.7	36242	Southside	0.0672	0.0804	0.0824	0.0938	0.0850	0.0819
60629	23.0	40712	Southside	0.0436	0.0583	0.0474	0.0611	0.0525	0.0526
60632	2.1	38438	Southside	0.0340	0.0408	0.0356	0.0504	0.0445	0.0408
60633	4.8	47136	Southside	0.0911	0.1056	0.0957	0.1076	0.1016	0.1005
60636	96.3	27871	Southside	0.0606	0.0701	0.0663	0.0789	0.0673	0.0689
60637	78.6	26845	Southside	0.0684	0.0802	0.0846	0.0962	0.0848	0.0831
60638	4.0	62511	Southside	0.0838	0.0871	0.0620	0.0908	0.0751	0.0799
60642	11.0	79633	Southside	0.0684	0.0787	0.0653	0.0927	0.0733	0.0757

60643	74.5	59593	Southside	0.0773	0.0886	0.0807	0.0888	0.0810	0.0835
60649	95.5	26797	Southside	0.0724	0.0816	0.0806	0.0926	0.0782	0.0814
60652	45.8	61797	Southside	0.0647	0.0760	0.0680	0.0801	0.0734	0.0726
60653	93.8	25923	Southside	0.0690	0.0810	0.0783	0.0897	0.0821	0.0803
60655	7.7	87105	Southside	0.0787	0.0948	0.0910	0.0975	0.0818	0.0889
60827	96.8	31063	Southside	0.0740	0.0764	0.0798	0.0822	0.0728	0.0773
Х	х	х	25 Zip Codes	0.0704	0.0792	0.0734	0.0879	0.0764	0.0776
х	х	х	Chicago	0.0788	0.0847	0.0782	0.0943	0.0853	0.0844
X	x	x	Difference	-0.0084	-0.0055	-0.0048	-0.0064	-0.0089	-0.0068

6. Successful Appeals Rate (x100), By 34 Northside Zip Codes (LOCATION), 2012-2016

Zip	Race	Income	Location	2012	2013	2014	2015	2016	2012-2016
60601	6.8	102254	Northside	0.0741	0.0801	0.0775	0.1030	0.0900	0.0845
60602	11.1	57368	Northside	0.1159	0.0742	0.0705	0.0793	0.0632	0.0824
60603	2.8	122031	Northside	0.1349	0.1280	0.0870	0.0964	0.0745	0.1049
60604	7.4	151731	Northside	0.0509	0.0705	0.0554	0.0776	0.0570	0.0620
60606	4.3	106661	Northside	0.0744	0.0844	0.0688	0.0679	0.0734	0.0742
60610	18.2	75892	Northside	0.0879	0.1019	0.0872	0.1179	0.0974	0.0985
60611	4.4	87280	Northside	0.0801	0.0768	0.0831	0.1053	0.0974	0.0877
60612	61.7	35888	Northside	0.0665	0.0788	0.0816	0.0830	0.0779	0.0777
60613	7.8	72126	Northside	0.0811	0.0856	0.0803	0.1086	0.1002	0.0911
60614	3.9	92714	Northside	0.0804	0.0909	0.0853	0.1123	0.0929	0.0918
60618	3.5	57500	Northside	0.0683	0.0851	0.0775	0.0924	0.0896	0.0827
60622	8.3	75163	Northside	0.0623	0.0648	0.0613	0.0838	0.0736	0.0689
60624	95.3	22204	Northside	0.0476	0.0626	0.0638	0.0733	0.0676	0.0633
60625	4.7	56507	Northside	0.0827	0.0807	0.0790	0.0950	0.0869	0.0849
60626	25.9	36439	Northside	0.1015	0.1049	0.0907	0.1146	0.1157	0.1053
60630	1.4	62244	Northside	0.0918	0.0891	0.0862	0.1036	0.1021	0.0945
60631	0.5	76400	Northside	0.1024	0.1036	0.0810	0.1190	0.0911	0.0994
60634	1.4	56382	Northside	0.0733	0.0754	0.0698	0.0879	0.0742	0.0762
60639	16.6	38798	Northside	0.0470	0.0615	0.0559	0.0618	0.0539	0.0561
60640	18.1	47631	Northside	0.0929	0.0966	0.0914	0.1215	0.1127	0.1030
60641	2.8	51597	Northside	0.0745	0.0792	0.0728	0.0828	0.0839	0.0787

60644	94.3	26882	Northside	0.0541	0.0786	0.0806	0.0884	0.0715	0.0756
60645	14.9	47633	Northside	0.1148	0.1144	0.1123	0.1227	0.1238	0.1176
60646	0.8	73246	Northside	0.1009	0.0987	0.0875	0.1032	0.1044	0.0989
60647	7.4	56257	Northside	0.0592	0.0673	0.0598	0.0765	0.0676	0.0660
60651	63.7	32006	Northside	0.0486	0.0708	0.0668	0.0767	0.0686	0.0667
60654	7.3	90520	Northside	0.0805	0.0802	0.0732	0.0970	0.0822	0.0824
60656	1.8	57308	Northside	0.1462	0.1479	0.1426	0.1468	0.1489	0.1466
60657	2.8	79638	Northside	0.0779	0.0848	0.0767	0.1103	0.0917	0.0879
60659	8.9	48104	Northside	0.1358	0.1234	0.1217	0.1373	0.1539	0.1345
60660	15.7	41412	Northside	0.1174	0.1103	0.1052	0.1245	0.1235	0.1161
60661	6.9	98882	Northside	0.0796	0.0893	0.0761	0.0973	0.0808	0.0847
60706	0.7	52429	Northside	0.1058	0.0893	0.0946	0.1043	0.1372	0.1071
60707	16.5	54669	Northside	0.0778	0.0907	0.0733	0.0973	0.0921	0.0863
х	х	х	34 Zip Codes	0.0850	0.0888	0.0817	0.0991	0.0918	0.0894
Х	х	х	Chicago	0.0788	0.0847	0.0782	0.0943	0.0853	0.0844
X	х	х	Difference	0.0062	0.0041	0.0035	0.0048	0.0065	0.0050
Zip	Race	Income	Location	2012	2013	2014	2015	2016	2012-16
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60601	6.8	102254	Northside	0.5800	0.5732	0.5957	0.6085	0.6152	0.5946
60602	11.1	57368	Northside	0.6812	0.5843	0.6716	0.5647	0.6393	0.6318
60603	2.8	122031	Northside	0.7264	0.7304	0.7183	0.5889	0.6269	0.6837
60604	7.4	151731	Northside	0.3889	0.6129	0.6154	0.6462	0.5303	0.5521
60605	18.6	87668	Southside	0.5464	0.5412	0.5932	0.6366	0.5833	0.5789
60606	4.3	106661	Northside	0.5850	0.5991	0.6370	0.5145	0.5444	0.5758
60607	16.3	85917	Southside	0.5275	0.5392	0.5916	0.6232	0.5792	0.5721
60608	18.2	36216	Southside	0.5889	0.5938	0.6141	0.6333	0.6103	0.6082
60609	28.9	32284	Southside	0.6215	0.6432	0.6649	0.6621	0.6286	0.6452
60610	18.2	75892	Northside	0.5642	0.5944	0.6324	0.6323	0.6032	0.6047
60611	4.4	87280	Northside	0.5308	0.5147	0.6168	0.6165	0.5974	0.5726
60612	61.7	35888	Northside	0.5827	0.6328	0.6605	0.6357	0.5995	0.6237
60613	7.8	72126	Northside	0.5516	0.5499	0.5875	0.6236	0.6167	0.5867
60614	3.9	92714	Northside	0.5301	0.5410	0.6078	0.6231	0.5825	0.5751
60615	62.0	41108	Southside	0.5724	0.5839	0.6206	0.6211	0.5932	0.5990
60616	26.0	42594	Southside	0.6664	0.6106	0.6235	0.6468	0.6254	0.6375
60617	56.2	37796	Southside	0.6092	0.6235	0.6426	0.6683	0.6044	0.6313
60618	3.5	57500	Northside	0.5745	0.6355	0.6505	0.6513	0.6596	0.6357
60619	97.4	32239	Southside	0.5964	0.6339	0.6456	0.6615	0.6148	0.6327
60620	98.1	32168	Southside	0.6222	0.6249	0.6500	0.6637	0.6149	0.6363
60621	97.9	19832	Southside	0.6101	0.6528	0.6696	0.6562	0.6161	0.6430
60622	8.3	75163	Northside	0.5561	0.5453	0.5883	0.6317	0.6064	0.5858
60623	33.5	28091	Southside	0.6236	0.6466	0.6667	0.6708	0.6359	0.6505
60624	95.3	22204	Northside	0.5876	0.6706	0.6819	0.6667	0.6198	0.6496
60625	4.7	56507	Northside	0.6196	0.5941	0.6403	0.6583	0.6316	0.6287
60626	25.9	36439	Northside	0.6467	0.6518	0.6657	0.6630	0.6761	0.6602
60628	94.7	36242	Southside	0.5994	0.6292	0.6631	0.6692	0.6249	0.6394
60629	23.0	40712	Southside	0.5902	0.6443	0.6315	0.6432	0.6182	0.6272
60630	1.4	62244	Northside	0.6137	0.6151	0.6405	0.6524	0.6595	0.6366
60631	0.5	76400	Northside	0.5840	0.5989	0.6017	0.6493	0.5924	0.6064
60632	2.1	38438	Southside	0.5913	0.6119	0.6416	0.6564	0.6680	0.6340

F. Win Rate On Appeal (x100), By All 59 City of Chicago Zip Codes, 2012 to 2016

60633	4.8	47136	Southside	0.5938	0.6538	0.6697	0.7027	0.6560	0.6567
60634	1.4	56382	Northside	0.5854	0.5877	0.6201	0.6319	0.6160	0.6087
60636	96.3	27871	Southside	0.6291	0.6581	0.6713	0.6813	0.6251	0.6551
60637	78.6	26845	Southside	0.5885	0.6350	0.6631	0.6605	0.6185	0.6360
60638	4.0	62511	Southside	0.6015	0.6191	0.5956	0.6213	0.6213	0.6127
60639	16.6	38798	Northside	0.6177	0.6565	0.6590	0.6508	0.6227	0.6425
60640	18.1	47631	Northside	0.5996	0.6002	0.6405	0.6793	0.6499	0.6348
60641	2.8	51597	Northside	0.6167	0.6360	0.6506	0.6501	0.6494	0.6407
60642	11.0	79633	Southside	0.5236	0.5577	0.5869	0.6190	0.5880	0.5748
60643	74.5	59593	Southside	0.6091	0.6082	0.6344	0.6283	0.5959	0.6157
60644	94.3	26882	Northside	0.6117	0.6681	0.6983	0.6855	0.6126	0.6618
60645	14.9	47633	Northside	0.6400	0.6307	0.6707	0.6657	0.6671	0.6543
60646	0.8	73246	Northside	0.6024	0.5945	0.6372	0.6406	0.6220	0.6179
60647	7.4	56257	Northside	0.5624	0.5954	0.6010	0.6404	0.6177	0.6039
60649	95.5	26797	Southside	0.6050	0.6140	0.6248	0.6431	0.6005	0.6189
60651	63.7	32006	Northside	0.5867	0.6504	0.6772	0.6592	0.6442	0.6473
60652	45.8	61797	Southside	0.5679	0.5952	0.6185	0.6331	0.5932	0.6022
60653	93.8	25923	Southside	0.5870	0.6134	0.6296	0.6267	0.6109	0.6148
60654	7.3	90520	Northside	0.5339	0.5368	0.5781	0.5977	0.5865	0.5646
60655	7.7	87105	Southside	0.5572	0.5613	0.6396	0.6143	0.5814	0.5901
60656	1.8	57308	Northside	0.7094	0.6864	0.7339	0.7062	0.7397	0.7143
60657	2.8	79638	Northside	0.5305	0.5352	0.5809	0.6225	0.6002	0.5734
60659	8.9	48104	Northside	0.6753	0.6575	0.6977	0.7005	0.7244	0.6917
60660	15.7	41412	Northside	0.6487	0.6177	0.6691	0.6893	0.6727	0.6586
60661	6.9	98882	Northside	0.5119	0.5447	0.6163	0.6004	0.5938	0.5696
60706	0.7	52429	Northside	0.6857	0.6046	0.6995	0.6964	0.7628	0.6946
60707	16.5	54669	Northside	0.6398	0.6437	0.6567	0.6689	0.6711	0.6566
60827	96.8	31063	Southside	0.6495	0.6403	0.6909	0.6561	0.6246	0.6536
x	x	x	Chicago	0.5956	0.6106	0.6414	0.6443	0.6235	0.6238
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1. Win Rate On Appeal (x100), By 16 Majority-Black Zip Codes (RACE), 2012 to 2016

Zip	Race	Income	Location	2012	2013	2014	2015	2016	2012-2016
60612	61.7	35888	Northside	0.5827	0.6328	0.6605	0.6357	0.5995	0.6237

60615	62.0	41108	Southside	0.5724	0.5839	0.6206	0.6211	0.5932	0.5990
60617	56.2	37796	Southside	0.6092	0.6235	0.6426	0.6683	0.6044	0.6313
60619	97.4	32239	Southside	0.5964	0.6339	0.6456	0.6615	0.6148	0.6327
60620	98.1	32168	Southside	0.6222	0.6249	0.6500	0.6637	0.6149	0.6363
60621	97.9	19832	Southside	0.6101	0.6528	0.6696	0.6562	0.6161	0.6430
60624	95.3	22204	Northside	0.5876	0.6706	0.6819	0.6667	0.6198	0.6496
60628	94.7	36242	Southside	0.5994	0.6292	0.6631	0.6692	0.6249	0.6394
60636	96.3	27871	Southside	0.6291	0.6581	0.6713	0.6813	0.6251	0.6551
60637	78.6	26845	Southside	0.5885	0.6350	0.6631	0.6605	0.6185	0.6360
60643	74.5	59593	Southside	0.6091	0.6082	0.6344	0.6283	0.5959	0.6157
60644	94.3	26882	Northside	0.6117	0.6681	0.6983	0.6855	0.6126	0.6618
60649	95.5	26797	Southside	0.6050	0.6140	0.6248	0.6431	0.6005	0.6189
60651	63.7	32006	Northside	0.5867	0.6504	0.6772	0.6592	0.6442	0.6473
60653	93.8	25923	Southside	0.5870	0.6134	0.6296	0.6267	0.6109	0.6148
60827	96.8	31063	Southside	0.6495	0.6403	0.6909	0.6561	0.6246	0.6536
х	х	х	16 Zip Codes	0.6029	0.6337	0.6577	0.6552	0.6137	0.6349
х	x	х	Chicago	0.5956	0.6106	0.6414	0.6443	0.6235	0.6238
х	x	Х	Difference	0.0073	0.0231	0.0163	0.0109	-0.0098	0.0111

2. Win Rate On Appeal (x100), By 43 Majority-Other Zip Codes (RACE), 2012 to 2016

Zip	Race	Income	Location	2012	2013	2014	2015	2016	2012-2016
60601	6.8	102254	Northside	0.5800	0.5732	0.5957	0.6085	0.6152	0.5946
60602	11.1	57368	Northside	0.6812	0.5843	0.6716	0.5647	0.6393	0.6318
60603	2.8	122031	Northside	0.7264	0.7304	0.7183	0.5889	0.6269	0.6837
60604	7.4	151731	Northside	0.3889	0.6129	0.6154	0.6462	0.5303	0.5521
60605	18.6	87668	Southside	0.5464	0.5412	0.5932	0.6366	0.5833	0.5789
60606	4.3	106661	Northside	0.5850	0.5991	0.6370	0.5145	0.5444	0.5758
60607	16.3	85917	Southside	0.5275	0.5392	0.5916	0.6232	0.5792	0.5721
60608	18.2	36216	Southside	0.5889	0.5938	0.6141	0.6333	0.6103	0.6082
60609	28.9	32284	Southside	0.6215	0.6432	0.6649	0.6621	0.6286	0.6452
60610	18.2	75892	Northside	0.5642	0.5944	0.6324	0.6323	0.6032	0.6047
60611	4.4	87280	Northside	0.5308	0.5147	0.6168	0.6165	0.5974	0.5726

60613	7.8	72126	Northside	0.5516	0.5499	0.5875	0.6236	0.6167	0.5867
60614	3.9	92714	Northside	0.5301	0.5410	0.6078	0.6231	0.5825	0.5751
60616	26.0	42594	Southside	0.6664	0.6106	0.6235	0.6468	0.6254	0.6375
60618	3.5	57500	Northside	0.5745	0.6355	0.6505	0.6513	0.6596	0.6357
60622	8.3	75163	Northside	0.5561	0.5453	0.5883	0.6317	0.6064	0.5858
60623	33.5	28091	Southside	0.6236	0.6466	0.6667	0.6708	0.6359	0.6505
60625	4.7	56507	Northside	0.6196	0.5941	0.6403	0.6583	0.6316	0.6287
60626	25.9	36439	Northside	0.6467	0.6518	0.6657	0.6630	0.6761	0.6602
60629	23.0	40712	Southside	0.5902	0.6443	0.6315	0.6432	0.6182	0.6272
60630	1.4	62244	Northside	0.6137	0.6151	0.6405	0.6524	0.6595	0.6366
60631	0.5	76400	Northside	0.5840	0.5989	0.6017	0.6493	0.5924	0.6064
60632	2.1	38438	Southside	0.5913	0.6119	0.6416	0.6564	0.6680	0.6340
60633	4.8	47136	Southside	0.5938	0.6538	0.6697	0.7027	0.6560	0.6567
60634	1.4	56382	Northside	0.5854	0.5877	0.6201	0.6319	0.6160	0.6087
60638	4.0	62511	Southside	0.6015	0.6191	0.5956	0.6213	0.6213	0.6127
60639	16.6	38798	Northside	0.6177	0.6565	0.6590	0.6508	0.6227	0.6425
60640	18.1	47631	Northside	0.5996	0.6002	0.6405	0.6793	0.6499	0.6348
60641	2.8	51597	Northside	0.6167	0.6360	0.6506	0.6501	0.6494	0.6407
60642	11.0	79633	Southside	0.5236	0.5577	0.5869	0.6190	0.5880	0.5748
60645	14.9	47633	Northside	0.6400	0.6307	0.6707	0.6657	0.6671	0.6543
60646	0.8	73246	Northside	0.6024	0.5945	0.6372	0.6406	0.6220	0.6179
60647	7.4	56257	Northside	0.5624	0.5954	0.6010	0.6404	0.6177	0.6039
60652	45.8	61797	Southside	0.5679	0.5952	0.6185	0.6331	0.5932	0.6022
60654	7.3	90520	Northside	0.5339	0.5368	0.5781	0.5977	0.5865	0.5646
60655	7.7	87105	Southside	0.5572	0.5613	0.6396	0.6143	0.5814	0.5901
60656	1.8	57308	Northside	0.7094	0.6864	0.7339	0.7062	0.7397	0.7143
60657	2.8	79638	Northside	0.5305	0.5352	0.5809	0.6225	0.6002	0.5734
60659	8.9	48104	Northside	0.6753	0.6575	0.6977	0.7005	0.7244	0.6917
60660	15.7	41412	Northside	0.6487	0.6177	0.6691	0.6893	0.6727	0.6586
60661	6.9	98882	Northside	0.5119	0.5447	0.6163	0.6004	0.5938	0.5696
60706	0.7	52429	Northside	0.6857	0.6046	0.6995	0.6964	0.7628	0.6946
60707	16.5	54669	Northside	0.6398	0.6437	0.6567	0.6689	0.6711	0.6566
Х	Х	Х	43 Zip Codes	0.5928	0.6020	0.6353	0.6402	0.6271	0.6197
X	Х	X	Chicago	0.5956	0.6106	0.6414	0.6443	0.6235	0.6238

Х	Х	Х	Difference	-0.0028	-0.0086	-0.0061	-0.0041	0.0036	-0.0041

3. Win Rate On Appeal (x100), By 28 Lower-Income Zip Codes (INCOME), 2012-2016

Zip	Race	Income	Location	2012	2013	2014	2015	2016	2012-2016
60608	18.2	36216	Southside	0.5889	0.5938	0.6141	0.6333	0.6103	0.6082
60609	28.9	32284	Southside	0.6215	0.6432	0.6649	0.6621	0.6286	0.6452
60612	61.7	35888	Northside	0.5827	0.6328	0.6605	0.6357	0.5995	0.6237
60615	62.0	41108	Southside	0.5724	0.5839	0.6206	0.6211	0.5932	0.5990
60616	26.0	42594	Southside	0.6664	0.6106	0.6235	0.6468	0.6254	0.6375
60617	56.2	37796	Southside	0.6092	0.6235	0.6426	0.6683	0.6044	0.6313
60619	97.4	32239	Southside	0.5964	0.6339	0.6456	0.6615	0.6148	0.6327
60620	98.1	32168	Southside	0.6222	0.6249	0.6500	0.6637	0.6149	0.6363
60621	97.9	19832	Southside	0.6101	0.6528	0.6696	0.6562	0.6161	0.6430
60623	33.5	28091	Southside	0.6236	0.6466	0.6667	0.6708	0.6359	0.6505
60624	95.3	22204	Northside	0.5876	0.6706	0.6819	0.6667	0.6198	0.6496
60626	25.9	36439	Northside	0.6467	0.6518	0.6657	0.6630	0.6761	0.6602
60628	94.7	36242	Southside	0.5994	0.6292	0.6631	0.6692	0.6249	0.6394
60629	23.0	40712	Southside	0.5902	0.6443	0.6315	0.6432	0.6182	0.6272
60632	2.1	38438	Southside	0.5913	0.6119	0.6416	0.6564	0.6680	0.6340
60633	4.8	47136	Southside	0.5938	0.6538	0.6697	0.7027	0.6560	0.6567
60636	96.3	27871	Southside	0.6291	0.6581	0.6713	0.6813	0.6251	0.6551
60637	78.6	26845	Southside	0.5885	0.6350	0.6631	0.6605	0.6185	0.6360
60639	16.6	38798	Northside	0.6177	0.6565	0.6590	0.6508	0.6227	0.6425
60640	18.1	47631	Northside	0.5996	0.6002	0.6405	0.6793	0.6499	0.6348
60644	94.3	26882	Northside	0.6117	0.6681	0.6983	0.6855	0.6126	0.6618
60645	14.9	47633	Northside	0.6400	0.6307	0.6707	0.6657	0.6671	0.6543
60649	95.5	26797	Southside	0.6050	0.6140	0.6248	0.6431	0.6005	0.6189
60651	63.7	32006	Northside	0.5867	0.6504	0.6772	0.6592	0.6442	0.6473
60653	93.8	25923	Southside	0.5870	0.6134	0.6296	0.6267	0.6109	0.6148
60659	8.9	48104	Northside	0.6753	0.6575	0.6977	0.7005	0.7244	0.6917
60660	15.7	41412	Northside	0.6487	0.6177	0.6691	0.6893	0.6727	0.6586
60827	96.8	31063	Southside	0.6495	0.6403	0.6909	0.6561	0.6246	0.6536
х	x	X	28 Zip Codes	0.6122	0.6339	0.6573	0.6614	0.6314	0.6409

Х	х	Х	Chicago	0.5956	0.6106	0.6414	0.6443	0.6235	0.6238
х	х	х	Difference	0.0166	0.0233	0.0159	0.0171	0.0079	0.0171

4. Win Rate On Appeal (x100), By 31 Higher-Income Zip Codes (INCOME), 2012-2016

Zip	Race	Income	Location	2012	2013	2014	2015	2016	2012-2016
60601	6.8	102254	Northside	0.5800	0.5732	0.5957	0.6085	0.6152	0.5946
60602	11.1	57368	Northside	0.6812	0.5843	0.6716	0.5647	0.6393	0.6318
60603	2.8	122031	Northside	0.7264	0.7304	0.7183	0.5889	0.6269	0.6837
60604	7.4	151731	Northside	0.3889	0.6129	0.6154	0.6462	0.5303	0.5521
60605	18.6	87668	Southside	0.5464	0.5412	0.5932	0.6366	0.5833	0.5789
60606	4.3	106661	Northside	0.5850	0.5991	0.6370	0.5145	0.5444	0.5758
60607	16.3	85917	Southside	0.5275	0.5392	0.5916	0.6232	0.5792	0.5721
60610	18.2	75892	Northside	0.5642	0.5944	0.6324	0.6323	0.6032	0.6047
60611	4.4	87280	Northside	0.5308	0.5147	0.6168	0.6165	0.5974	0.5726
60613	7.8	72126	Northside	0.5516	0.5499	0.5875	0.6236	0.6167	0.5867
60614	3.9	92714	Northside	0.5301	0.5410	0.6078	0.6231	0.5825	0.5751
60618	3.5	57500	Northside	0.5745	0.6355	0.6505	0.6513	0.6596	0.6357
60622	8.3	75163	Northside	0.5561	0.5453	0.5883	0.6317	0.6064	0.5858
60625	4.7	56507	Northside	0.6196	0.5941	0.6403	0.6583	0.6316	0.6287
60630	1.4	62244	Northside	0.6137	0.6151	0.6405	0.6524	0.6595	0.6366
60631	0.5	76400	Northside	0.5840	0.5989	0.6017	0.6493	0.5924	0.6064
60634	1.4	56382	Northside	0.5854	0.5877	0.6201	0.6319	0.6160	0.6087
60638	4.0	62511	Southside	0.6015	0.6191	0.5956	0.6213	0.6213	0.6127
60641	2.8	51597	Northside	0.6167	0.6360	0.6506	0.6501	0.6494	0.6407
60642	11.0	79633	Southside	0.5236	0.5577	0.5869	0.6190	0.5880	0.5748
60643	74.5	59593	Southside	0.6091	0.6082	0.6344	0.6283	0.5959	0.6157
60646	0.8	73246	Northside	0.6024	0.5945	0.6372	0.6406	0.6220	0.6179
60647	7.4	56257	Northside	0.5624	0.5954	0.6010	0.6404	0.6177	0.6039
60652	45.8	61797	Southside	0.5679	0.5952	0.6185	0.6331	0.5932	0.6022
60654	7.3	90520	Northside	0.5339	0.5368	0.5781	0.5977	0.5865	0.5646
60655	7.7	87105	Southside	0.5572	0.5613	0.6396	0.6143	0.5814	0.5901
60656	1.8	57308	Northside	0.7094	0.6864	0.7339	0.7062	0.7397	0.7143
60657	2.8	79638	Northside	0.5305	0.5352	0.5809	0.6225	0.6002	0.5734

60661	6.9	98882	Northside	0.5119	0.5447	0.6163	0.6004	0.5938	0.5696
60706	0.7	52429	Northside	0.6857	0.6046	0.6995	0.6964	0.7628	0.6946
60707	16.5	54669	Northside	0.6398	0.6437	0.6567	0.6689	0.6711	0.6566
X	х	х	31 Zip Codes	0.5806	0.5895	0.6270	0.6288	0.6164	0.6084
X	х	х	Chicago	0.5956	0.6106	0.6414	0.6443	0.6235	0.6238
х	х	х	Difference	-0.0150	-0.0211	-0.0144	-0.0155	-0.0071	-0.0154

5. Win Rate On Appeal (x100), By 25 Southside Zip Codes (LOCATION), 2012-2016

Zip	Race	Income	Location	2012	2013	2014	2015	2016	2012-2016
60605	18.6	87668	Southside	0.5464	0.5412	0.5932	0.6366	0.5833	0.5789
60607	16.3	85917	Southside	0.5275	0.5392	0.5916	0.6232	0.5792	0.5721
60608	18.2	36216	Southside	0.5889	0.5938	0.6141	0.6333	0.6103	0.6082
60609	28.9	32284	Southside	0.6215	0.6432	0.6649	0.6621	0.6286	0.6452
60615	62.0	41108	Southside	0.5724	0.5839	0.6206	0.6211	0.5932	0.5990
60616	26.0	42594	Southside	0.6664	0.6106	0.6235	0.6468	0.6254	0.6375
60617	56.2	37796	Southside	0.6092	0.6235	0.6426	0.6683	0.6044	0.6313
60619	97.4	32239	Southside	0.5964	0.6339	0.6456	0.6615	0.6148	0.6327
60620	98.1	32168	Southside	0.6222	0.6249	0.6500	0.6637	0.6149	0.6363
60621	97.9	19832	Southside	0.6101	0.6528	0.6696	0.6562	0.6161	0.6430
60623	33.5	28091	Southside	0.6236	0.6466	0.6667	0.6708	0.6359	0.6505
60628	94.7	36242	Southside	0.5994	0.6292	0.6631	0.6692	0.6249	0.6394
60629	23.0	40712	Southside	0.5902	0.6443	0.6315	0.6432	0.6182	0.6272
60632	2.1	38438	Southside	0.5913	0.6119	0.6416	0.6564	0.6680	0.6340
60633	4.8	47136	Southside	0.5938	0.6538	0.6697	0.7027	0.6560	0.6567
60636	96.3	27871	Southside	0.6291	0.6581	0.6713	0.6813	0.6251	0.6551
60637	78.6	26845	Southside	0.5885	0.6350	0.6631	0.6605	0.6185	0.6360
60638	4.0	62511	Southside	0.6015	0.6191	0.5956	0.6213	0.6213	0.6127
60642	11.0	79633	Southside	0.5236	0.5577	0.5869	0.6190	0.5880	0.5748
60643	74.5	59593	Southside	0.6091	0.6082	0.6344	0.6283	0.5959	0.6157
60649	95.5	26797	Southside	0.6050	0.6140	0.6248	0.6431	0.6005	0.6189
60652	45.8	61797	Southside	0.5679	0.5952	0.6185	0.6331	0.5932	0.6022
60653	93.8	25923	Southside	0.5870	0.6134	0.6296	0.6267	0.6109	0.6148
60655	7.7	87105	Southside	0.5572	0.5613	0.6396	0.6143	0.5814	0.5901

60827	96.8	31063	Southside	0.6495	0.6403	0.6909	0.6561	0.6246	0.6536
х	х	х	25 Zip Codes	0.5951	0.6134	0.6377	0.6480	0.6133	0.6226
x	х	Х	Chicago	0.5956	0.6106	0.6414	0.6443	0.6235	0.6238
x	х	х	Difference	-0.0005	0.0028	-0.0037	0.0037	-0.0102	-0.0012

6. Win Rate On Appeal (x100), By 34 Northside Zip Codes (LOCATION), 2012-2016

Zip	Race	Income	Location	2012	2013	2014	2015	2016	2012-2016
60601	6.8	102254	Northside	0.5800	0.5732	0.5957	0.6085	0.6152	0.5946
60602	11.1	57368	Northside	0.6812	0.5843	0.6716	0.5647	0.6393	0.6318
60603	2.8	122031	Northside	0.7264	0.7304	0.7183	0.5889	0.6269	0.6837
60604	7.4	151731	Northside	0.3889	0.6129	0.6154	0.6462	0.5303	0.5521
60606	4.3	106661	Northside	0.5850	0.5991	0.6370	0.5145	0.5444	0.5758
60610	18.2	75892	Northside	0.5642	0.5944	0.6324	0.6323	0.6032	0.6047
60611	4.4	87280	Northside	0.5308	0.5147	0.6168	0.6165	0.5974	0.5726
60612	61.7	35888	Northside	0.5827	0.6328	0.6605	0.6357	0.5995	0.6237
60613	7.8	72126	Northside	0.5516	0.5499	0.5875	0.6236	0.6167	0.5867
60614	3.9	92714	Northside	0.5301	0.5410	0.6078	0.6231	0.5825	0.5751
60618	3.5	57500	Northside	0.5745	0.6355	0.6505	0.6513	0.6596	0.6357
60622	8.3	75163	Northside	0.5561	0.5453	0.5883	0.6317	0.6064	0.5858
60624	95.3	22204	Northside	0.5876	0.6706	0.6819	0.6667	0.6198	0.6496
60625	4.7	56507	Northside	0.6196	0.5941	0.6403	0.6583	0.6316	0.6287
60626	25.9	36439	Northside	0.6467	0.6518	0.6657	0.6630	0.6761	0.6602
60630	1.4	62244	Northside	0.6137	0.6151	0.6405	0.6524	0.6595	0.6366
60631	0.5	76400	Northside	0.5840	0.5989	0.6017	0.6493	0.5924	0.6064
60634	1.4	56382	Northside	0.5854	0.5877	0.6201	0.6319	0.6160	0.6087
60639	16.6	38798	Northside	0.6177	0.6565	0.6590	0.6508	0.6227	0.6425
60640	18.1	47631	Northside	0.5996	0.6002	0.6405	0.6793	0.6499	0.6348
60641	2.8	51597	Northside	0.6167	0.6360	0.6506	0.6501	0.6494	0.6407
60644	94.3	26882	Northside	0.6117	0.6681	0.6983	0.6855	0.6126	0.6618
60645	14.9	47633	Northside	0.6400	0.6307	0.6707	0.6657	0.6671	0.6543
60646	0.8	73246	Northside	0.6024	0.5945	0.6372	0.6406	0.6220	0.6179
60647	7.4	56257	Northside	0.5624	0.5954	0.6010	0.6404	0.6177	0.6039
60651	63.7	32006	Northside	0.5867	0.6504	0.6772	0.6592	0.6442	0.6473

60654	7.3	90520	Northside	0.5339	0.5368	0.5781	0.5977	0.5865	0.5646
60656	1.8	57308	Northside	0.7094	0.6864	0.7339	0.7062	0.7397	0.7143
60657	2.8	79638	Northside	0.5305	0.5352	0.5809	0.6225	0.6002	0.5734
60659	8.9	48104	Northside	0.6753	0.6575	0.6977	0.7005	0.7244	0.6917
60660	15.7	41412	Northside	0.6487	0.6177	0.6691	0.6893	0.6727	0.6586
60661	6.9	98882	Northside	0.5119	0.5447	0.6163	0.6004	0.5938	0.5696
60706	0.7	52429	Northside	0.6857	0.6046	0.6995	0.6964	0.7628	0.6946
60707	16.5	54669	Northside	0.6398	0.6437	0.6567	0.6689	0.6711	0.6566
x	х	х	34 Zip Codes	0.5959	0.6085	0.6441	0.6415	0.6310	0.6247
x	х	х	Chicago	0.5956	0.6106	0.6414	0.6443	0.6235	0.6238
x	х	х	Difference	0.0003	-0.0021	0.0027	-0.0028	0.0075	0.0009