► ILLINOIS

TRAFFIC AND PEDESTRIAN STOP STUDY

2023 ANNUAL REPORT PEDESTRIAN STOP ANALYSIS SUBMITTED BY THE MOUNTAIN-WHISPER-LIGHT: STATISTICS AND DATA SCIENCE







Illinois Traffic and Pedestrian Stop Study

2023 ANNUAL REPORT: PEDESTRIAN STOPS

Part I Executive Summary and Appendices

Prepared for the Illinois Department of Transportation

By

The Mountain-Whisper-Light: Statistics & Data Science



In Cooperation with SC-B Consulting, Inc.



Acknowledgements

The Mountain-Whisper-Light Statistics and SC-B Consulting, Inc. gratefully acknowledge the contributions of Bureau Chief Jessica Keldermans and Sean Berberet, Bureau of Data Collection at the Illinois Department of Transportation, and their associates at IDOT. We are also grateful to the law enforcement agencies and their staff for their diligence and patience in collecting and processing the data used in this study.

2023 study team, Illinois Traffic and Pedestrian Stops Study

The Mountain-Whisper-Light: Statistics & Data Science

- Nayak L. Polissar, PhD, Principal Investigator
- Nirnaya Miljacic, MS, PhD
- Daniel S. Hippe, MS
- Shannon Golden, MA
- Cindy Elder, MA
- Mengran Zhang, MA

SC-B Consulting

• Sharie Carter-Bane, President

Table of Contents

Executiv	ve Summary	1
I.	Background	1
II.	Introduction	2
	What is racial profiling?	2
	How is this report structured?	2
	What are the sources of the data?	2
	How were the data analyzed?	2
	References (for Section II)	3
III.	Guide to Using Pedestrian Tables	4
IV.	Interpretation of Pedestrian Tables	8
	95% Confidence Interval	8
	Ratios	8
	Limitations	8
	Statistics based on stops only	9
	Can stop rates be compared across years?	9
V.	Benchmarks	10
VI.	Selected Findings	11
	Agency reporting status	.11
	Number of stops	.11
	Statewide rate ratios	.14
	Distribution of stop rate ratios	.14
	Searches and Contraband	.15
VII.	Considerations for Interpreting the Data	16
VIII.	Looking Ahead	17
Append	lix A. Pedestrian Stop Data Collection Form in Use during 2023	18
Append	lix B. Technical Notes on Rates, Percentages and Ratios	19
Append	lix C. Technical Notes on Benchmarks	22
Append	lix D. Additional Notes on Illinois Law Concerning the Stops Study	24

Executive Summary

I. Background

In October 2019, The Mountain-Whisper-Light, Inc. (aka the Mountain-Whisper-Light: Statistics & Data Science, and hereafter, "TMWL") was awarded a contract to conduct a statistical study of the traffic and pedestrian stop data provided by law enforcement agencies to the Illinois Department of Transportation, pursuant to the Illinois Vehicle Code, 625 ILCS 5/11-212 Traffic and Pedestrian Stop Statistical Study. TMWL is carrying out the project in cooperation with SC-B Consulting Inc., an Illinois firm. Reports have already been issued on 2019, 2020, 2021 and 2022 traffic and pedestrian stops in Illinois and are available online at https://www.idot.illinois.gov/transportation-system/local-transportation-partners/law-enforcement/illinois-traffic-stop-study.

According to the IDOT website, "On July 18, 2003, Senate Bill 30 was signed into law to establish a fouryear statewide study of data from traffic stops to identify racial bias. The study began on January 1, 2004, and was originally scheduled to end December 31, 2007. However, the legislature extended the data collection several times, and also expanded the study to include data on pedestrian stops. Public Act 101-0024, which took effect on June 21, 2019, eliminated the study's scheduled end date of July 1, 2019, and extended the data collection."

Under that provision of the Illinois Vehicle Code, IDOT is responsible for providing a standardized law enforcement data compilation form (see Appendix A below) and analyzing the data and submitting a report of the previous year's findings to the Governor, General Assembly, the Racial Profiling Prevention and Data Oversight Board, and each law enforcement agency no later than July 1 of each year. In May 2024, TMWL and SC-B, in cooperation with IDOT's Bureau of Data Collection, have provided copies of statistical tables to 806 law enforcement agencies in the state of Illinois. The tables were based on the data collection provided by the respective agencies on traffic and pedestrian stops. The agencies had reported at least one traffic or pedestrian stop and were invited to review and comment on the tables. Some agencies provided comments, and the comments from an agency are included with their tables in Part II of this report may wish to peruse the agency comments and the responses. Comments on the Traffic stop tables (or general comments) and comments on the Pedestrian stop tables are included in the Part II Traffic or Pedestrian tables, respectively.

This document covers the pedestrian stop study. A companion volume with a similar format contains an Executive Summary for the traffic stop study.

Key Findings

- 1. The total number of reported pedestrian stops in 2023 was 83,149, a 14% increase from 2022.
- 2. Of the reporting agencies, a substantial fraction (48.6%) were non-compliant in their reporting of pedestrian stops (Table 2).
- 3. Overall, nonwhite pedestrians were stopped more than white pedestrians in 70% of the rate ratios for agencies with at least 10 stops (Table 4).

The rate of search beyond a pat down is substantial for all of the racial groups (approximately 19%-47% of stops), and of those searches, the yield of contraband is also substantial for all racial groups (approximately 29-58% of searches beyond a pat down).

II. Introduction

What is racial profiling?

The Illinois Criminal Justice Information Authority describes racial profiling as "police-led action that is initiated based on a person's race or ethnicity."¹ In 2003, legislation called the Illinois Traffic and Pedestrian Stop Statistical Study Act was passed requiring officers to document who/why they stopped individuals for traffic violations. These data are reported annually to the Illinois Department of Transportation for review. In 2019, this Act became permanent and supports a Task Force to compile and analyze the resulting data.² This analysis is part of those ongoing efforts, which include compilation of the data and statistical analyses to uncover potential "statistically significant aberrations" in traffic stops, pedestrian stops, stops by agency and searches of drivers and pedestrians (see Section 1 and Appendix D for more details). Findings are made available to the public and shared with law enforcement agencies to increase their awareness of potential racial profiling in their communities and explore ways to reduce/eliminate it. The IDOT Racial Profiling Prevention and Data Oversight Board meets regularly to oversee these efforts.

How is this report structured?

The report is presented in two parts. **Part I** is this Executive Summary, which includes appendices with detailed technical information on the statistical methodology and analysis. **Part II** includes extensive tables (one set of tables for each law enforcement agency that collected data for stops conducted in 2023). The tables show stop rates for each racial group along with other statistics that cover activity during the stops, such as citations or warnings, searches and contraband found.

To obtain the greatest benefit from this report, readers are encouraged to read the full Executive Summary with special attention to the Guide to Using Pedestrian Tables (Section III, below). Section III includes definitions of statistical terms used in this report and explanation of the data presented in each panel of the tables. An Interpretation section is also included with additional details on the numeric results presented in the tables and a plain-language description of how the analysis was implemented. Finally, the section on Selected Findings highlights some statewide results. The Appendices include technical material that describes the statistical methods and calculations in detail. The information in appendices is provided for readers who wish to have a deeper understanding of the methodology.

What are the sources of the data?

As noted above, per Illinois law, officers from law enforcement agencies are required to fill in a report when they stop a driver or pedestrian. Separate templates are provided for traffic and pedestrian stops.

To follow the convention of previous reporting on the Illinois Traffic and Pedestrian Stop Study, two separate reports are submitted, the Illinois Traffic Stop Study and the Illinois Pedestrian Stop Study. The above-mentioned data collection templates (known as Traffic Stop or Pedestrian Stop Data Forms) are

shown in Appendix A of the ITSS and IPSS. There are instruction manuals that accompany the traffic and pedestrian stops data collection forms available online at <u>https://idot.illinois.gov/transportation-system/local-transportation-partners/law-enforcement/reporting/illinois-traffic-and-pedestrian-stop-study/forms.html</u>

How were the data analyzed?

The results of the data collection are that 805 agencies generated data on 2,260,725 traffic stops and 242 agencies generated data on 83,149 pedestrian stops in 2023. A total of 806 agencies provided data on either traffic stops or pedestrian stops, with 564 agencies providing traffic stop data only, one agency providing pedestrian stop data only, and 241 agencies providing both traffic and pedestrian stop data. Only 78 traffic stops (0.003% of traffic stops) were missing the race designation. None of the reported pedestrian stops was missing the race designation. Further analysis was carried out to provide statistics that may be helpful in determining if there is potential bias against minorities in initiating a stop or in the activities that occur during a stop.

As specified by Illinois statute for this study, the tables report on the stops and subsequent experience of individuals stopped. The stopped individuals are classified into one of six racial groups. The law enforcement officer filling in the data collection form must use their judgment to classify an individual into one of the following groups:

- Black or African American
- Hispanic or Latino
- Asian
- American Indian or Alaska Native
- Native Hawaiian or Other Pacific Islander
- White.

The data collection forms are extensive. There are more than 60 data items listed for traffic stops and more than 20 data items listed for pedestrian stops. Some items are left blank unless there are further actions beyond a stop, such as a search.

Data collected by local agencies for pedestrian stops include:

- Information about the pedestrian (including race) and the officer
- The location of the stop (using location designations developed by each agency)
- Reason for the stop (eight choices)
- Outcome of the stop (warning/citation or arrest)
- Pat down/frisk or search activity and findings of contraband.

References (for Section II)

1. Green, E., & Lavery, T. (2022). 2020-2021 Illinois Traffic and Pedestrian Stop Data Use and Collection Task Force Findings. Illinois Criminal Justice Information Authority.

2. Illinois General Assembly. (2022, May 13). *Traffic and Pedestrian Stop Statistical Study.* Website. <u>https://www.ilga.gov/legislation/ilcs/fulltext.asp?DocName=062500050K11-212</u>

III. Guide to Using Pedestrian Tables

While many readers of this report previously reviewed traffic and pedestrian stop tables for their respective jurisdictions, here are some brief explanations of the statistical data.

Table 1 is included as an example to show stop rates, percentages, and ratios. A ratio compares either a rate or a percentage for a minority to the corresponding rate or percentage for whites. The ratios are intended to make it easier to see aberrations that may suggest the possibility of racial profiling. The word "possibility" is very important, because racial profiling cannot be proved by the numeric results in this report alone. Some of the inherent uncertainties and limitations of the statistics are explained later and should be considered during the review of the statistical results presented.

The following section includes an example of pedestrian tables and offers a guide to the numbers in the tables, explained panel by panel. The table reproduced here (Table 1) refers to all pedestrian stops reported in 2023 for the state of Illinois. The counts, rates, percentages and ratios are for purposes of illustration only and are not tied to any individual agency.

Before using the tables: Following the tables there is an important section on interpretation of the rates, ratios, percentages and 95% confidence intervals. Reading that section is important to enable users of this report to make a proper assessment of what the numbers represent.

Rates, percentages, and ratios: The terms "rate," "percentage" and "ratio" are used throughout this report. A brief explanation of the terms is provided here.

A <u>rate</u> in this context is the number of individuals (such as the number of individuals stopped) divided by the population the individuals came from, also known in this report as the "benchmark," a term that will be used repeatedly. For example, in Illinois in 2023 there were 20,458 stops of pedestrians whom the officer assigned to the category "Hispanic or Latino." The estimated benchmark population of Hispanic or Latinos aged 12-80 in Illinois in 2023 was 1,809,087. (As discussed later, individuals aged 12-80 in Illinois are considered to have a non-negligible risk of being stopped.) Dividing the 20,458 by 1,809,087 yields the stop rate of 0.0113. That is, there was an average of 0.0133 stops per member of the Hispanic or Latino population age 12-80. The decimal value 0.0133 does not mean that 1.13% of Hispanic or Latinos in the age range had a pedestrian stop. Some individuals may have been stopped more than once.

A **percentage** in this context has the usual meaning. For example, in Illinois in 2023 there were 8,227 stops of pedestrians whom the officer assigned to the category "white." There were 1,957 of those stops with a pat down. The number of pat downs, 1,957, divided by the number of stops, 8,227, yields the decimal fraction 0.24. That fraction represented as a percentage is 24%. In Illinois in 2023, 24% of stops of pedestrians assessed as being White resulted in a pat down.

The <u>ratio</u> used in this report is either the ratio of a minority rate to a white rate or the ratio of a minority percentage to a white percentage. If the ratio is 2.0, for example, it means that the minority rate (or percentage) is twice the white rate (or percentage).

<u>**Table 1**</u> shows the Illinois statewide results for illustration of pedestrian stop reporting. A guide to each panel of the table follows.

Panel 1 (shaded rows) presents the pedestrian stops, benchmark and stop rate by racial group, and stop rate ratio for each minority group compared to white pedestrians. Ninety-five percent

confidence intervals are shown (in parentheses) for rates and rate ratios. The 95% confidence interval is explained in a short section with that heading below.

Panel 2 shows pat downs, searches beyond pat down, and outcomes of these searches for each racial group. The number, percentage (in parentheses), and 95% confidence interval [in brackets, like this] are shown for each outcome. The contraband-found percentage is calculated based on all searches beyond pat down. The ratio and 95% confidence interval (in parentheses) are shown, comparing each minority group to white pedestrians on percentage with contraband found among all searches beyond pat down.

Panel 3 shows outcomes of the pedestrian stops including warning/citation (one combined category) and custodial arrest for each racial group. The number, percentage (in parentheses), and 95% confidence interval [in brackets] are shown for each outcome. The percentages are based on all pedestrian stops for each minority group. The ratio of percentages and 95% confidence interval (in parentheses) comparing each minority group to white pedestrians is shown for custodial arrests.

The top-right corner of the table indicates the type of benchmark used. All pedestrian benchmarks are territory-based, meaning they are based on local population statistics from the U.S. census. The note at the bottom left of the table lists the primary area of the benchmark, which captures the jurisdiction of the agency. These areas can be one or more cities (or towns or villages), counties or the state. All pedestrian benchmarks only include the population within the primary area, in contrast to traffic benchmarks, which include surrounding areas as well. Section V on benchmarks provides more information on how the benchmarks were constructed.

A ratio of 1.0 for whites: For all rows showing comparisons of minority groups to whites, a value of 1.0 is shown in the white racial group column, the reference group. In this column for whites, the whites are being compared to themselves, so the ratio of rates must be 1.0. The column is included to make it clear that the whites are the reference group to which each minority is compared.

Zero stops or zero benchmark: For some agencies, the number of stops or the benchmark value or the number of outcomes may be zero for a racial group. When it is not possible to calculate a rate or percentage or ratio and an associated 95% confidence interval because of zero stops or zero benchmarks or zero outcomes, an "NA" is reported in the table. When reporting information such as searches following stops or contraband found, sometimes all racial groups have entries of zero in the row. That is, there were no searches of any racial group or no contraband found for any racial group. In that case, the row is omitted. Similarly, when making comparisons to whites, if all minorities have counts of zero or the whites have a count of zero, the ratios comparing each minority to whites cannot be computed and the row of ratios is omitted.

Table 1. Example of a table of pedestrian stops: Counts, Rates, Percentages, and Ratios.

Summary of Pedestrian Stops for 2023 - ILLINOIS STATEWIDE RESULTS Benchmark: Territory-based*						
	White	Black or African American	Hispanic or Latino	Asian	American Indian or Alaska Native	Native Hawaiian or Other Pacific Islander
Panel: 1 Summary of Pedes	strian Stops, Rates, and Rate	Ratios with 95% Confidence	e Intervals. Total stops: 83,14	19. Total benchmark populati	on: 10,530,093.	
Stops (% of Total)	8,227 (9.9%)	53,351 (64%)	20,458 (25%)	874 (1.1%)	104 (0.1%)	135 (0.2%)
Benchmark (% of Total)	6,519,672 (62%)	1,486,619 (14%)	1,809,087 (17%)	659,132 (6.3%)	50,013 (0.5%)	5,570 (0.05%)
Stop Rate (95% Confidence Interval)	0.00126 (0.00123 - 0.00129)	0.0359 (0.0356 - 0.0362)	0.0113 (0.0112 - 0.0115)	0.0013 (0.0012 - 0.0014)	0.0021 (0.0017 - 0.0025)	0.024 (0.02 - 0.029)
Stop Rate Ratio vs White (95% Confidence Interval)	1.0	28.4 (27.8 - 29.1)	9 (8.7 - 9.2)	1.05 (0.979 - 1.13)	1.6 (1.3 - 2)	19 (16 - 23)
Panel: 2 Summary of Pat D	own Events - Number (Perce	ntage for the Racial Group) [95% Confidence Interval]			
Pat Down (% of Stops)	1,957 (24%) [23% - 25%]	22,177 (41.6%) [41% - 42.1%]	7,350 (36%) [35% - 37%]	205 (23%) [20% - 27%]	21 (20%) [12% - 31%]	30 (22%) [15% - 32%]
Search Beyond Pat Down (% of Stops)	2,212 (27%) [26% - 28%]	25,311 (47.4%) [46.9% - 48%]	8,877 (43%) [42% - 44%]	231 (26%) [23% - 30%]	24 (23%) [15% - 34%]	26 (19%) [13% - 28%]
Contraband Found (% of Searches, preceding row)	794 (36%) [33% - 38%]	12,433 (49%) [48% - 50%]	4,421 (50%) [48% - 51%]	97 (42%) [34% - 51%]	7 (29%) [12% - 60%]	15 (58%) [32% - 95%]
Contraband Found Ratio vs White (95% Confidence Interval)	1.0	1.4 (1.3 - 1.5)	1.4 (1.3 - 1.5)	1.2 (0.94 - 1.4)	0.81 (0.33 - 1.7)	1.6 (0.9 - 2.7)

Summary of Pedestrian Stops for 2023 - ILLINOIS STATEWIDE RESULTS Benchmark: Territory-based*							
	White	Black or African American	Hispanic or Latino	Asian	American Indian or Alaska Native	Native Hawaiian or Other Pacific Islander	
Panel: 3 Summary of Outcome of Stop - Number (Percentage of All Stops for the Racial Group with the Noted Outcome of the Stop) [95% Confidence Interval]							
Warning/Citation	2,154 (26%) [25% - 27%]	3,785 (7.1%) [6.9% - 7.3%]	1,916 (9.4%) [9% - 9.8%]	157 (18%) [15% - 21%]	11 (11%) [5.3% - 19%]	17 (13%) [7.3% - 20%]	
Custodial Arrest	1,215 (15%) [14% - 16%]	8,983 (16.8%) [16.5% - 17.2%]	2,487 (12.2%) [11.7% - 12.6%]	90 (10%) [8.3% - 13%]	10 (9.6%) [4.6% - 18%]	13 (9.6%) [5.1% - 16%]	
Custodial Arrest Ratio vs White (95% Confidence Interval)	1.0	1.14 (1.07 - 1.21)	0.82 (0.77 - 0.88)	0.7 (0.56 - 0.86)	0.65 (0.31 - 1.2)	0.65 (0.35 - 1.1)	
*Benchmark Definition							
Benchmark Type: Territory-based.							

Primary Benchmark Area (State): Illinois. 100% of the benchmark comes from zip codes within the primary area.

IV. Interpretation of Pedestrian Tables

95% Confidence Interval

Table 1 presents a "95% confidence interval" for each rate, percentage or ratio. The 95% confidence interval reflects uncertainty in estimating the rate, percentage or ratio due to sampling variability. The 95% confidence interval provides a range of plausible values. The "95%" figure means that when various studies include such an interval, 95% of the studies, on average, will include the *true* value in the interval. Because there is an element of chance involved in being stopped, being searched, etc., the true value of a rate or percentage or ratio is not known. The 95% confidence interval uses widely accepted methods and expresses some of the uncertainty in the estimated rate, percentage or ratio. The uncertainty is often due to small numbers of stops or a small benchmark population in the geographic area used to calculate rates, percentages or ratios.

Ratios

A ratio of rates or percentages with a value of 1.0 indicates that the rates or percentages are equal between the minority group and whites. Ratios above or below 1.0 show greater or lesser stop activity with minorities, respectively. Comparisons of minority groups to white drivers or white pedestrians where the 95% confidence interval lies above 1.0 (one) are **bolded** in the stop's tables. When the ratio is **bolded**, one can say that the value of 1.0 does not fall within the 95% confidence interval of the estimated ratio. These **bolded** ratios are statistical deviations and may be the basis for further consideration of potential racial disparities related to stops. A **bolded** ratio does not prove that there is racial profiling. (See "Limitations," below.) A **bolded** ratio may be taken as the basis for further inquiry. In addition to whether or not a ratio is bolded, the absolute magnitude of the ratio should be considered. For example, a **bolded** ratio of 5.0 is a higher priority to investigate than a small, **bolded** ratio of 1.2. A larger ratio implies the potential impact on individuals is larger, and it is less likely that the elevated ratio is only due to limitations of the chosen benchmark than when the ratio is closer to 1.0.

Limitations

There is a limitation in the use of ratios to determine potential racial disparities. The 95% confidence intervals for stop rates and stop rate ratios do not consider the error in estimating the driver and pedestrian benchmark populations. The population of drivers or pedestrians who are considered the source of the persons stopped by an agency's officers are a population, and that population is referred to as the "benchmark" for the agency. Note that each law enforcement agency has a "jurisdiction," which is the geographic area that the agency is responsible for policing. In this report, "agency" and "jurisdiction" are sometimes used interchangeably.

For this study, the pedestrian benchmark populations have been estimated based on the population located in cities and counties of Illinois corresponding to each agency's jurisdiction. Those population counts are available from the census and surveys carried out by the U.S. Census Bureau. However, the true pedestrian populations likely include people who reside in communities both inside and outside of the specific area of jurisdiction of an agency. As the pedestrian benchmarks count only people who reside within the agency's jurisdiction, people who live outside of those communities but enter the jurisdiction and may be encountered by law enforcement officers are not included in those benchmarks.

Thus, the benchmarks have some errors, and the extent of the error is unknown. If it were possible to estimate this error as it affects rates and rate ratios, the 95% confidence intervals would be wider, and some confidence intervals might then include 1.0 (no racial disparity) and would not prompt bolding and the need for further inquiry. The section labelled "**Benchmarks**", below, describes the methods used to estimate the population from which stopped individuals originated.

The census and ACS surveys have been used to designate pedestrian benchmark populations for this study because they have readily available populations for cities and counties. The census city and county populations are virtually the only option for building pedestrian benchmarks within the resources available to this study to annually choose benchmarks for hundreds of law enforcement agencies. The city and county populations do have some validity as benchmarks because they include the jurisdiction of interest, and it is expected that a substantial fraction of pedestrians in the jurisdiction originate from the designated benchmark city (or cities) and county (or counties).

Another limitation that may affect the rates, percentages and ratios is the designation of race by the law enforcement officer conducting the stop. That designation of race might not correspond to the driver's or pedestrian's own racial identity. See the companion report on traffic stops, Executive Summary Part I, for a discussion of this topic. In addition, the stop rate for a racial group will depend on a) the assignment of beats (geographic surveillance area) to officers in a jurisdiction and b) the degree of overlap of those beats to the residential area of each racial group. If there is higher (or lower) surveillance of an area with a high residential concentration of a racial group, then that can lead to a higher (or lower) stop rate for the racial group compared to areas where surveillance is constant across all racial groups.

Statistics based on stops only

The percentages and ratios of percentages in the tables are based on stop counts and stop activity only. The percentages and ratios of percentages do not depend on the estimated benchmark population, and they do not have the potential benchmark error noted above. Percentages based on stops will be a resource for any inquiry about potential racial profiling.

It is important to note that the percentages are calculated with reference to a specific activity. For example, in the pedestrian tables, the percentage of searches beyond pat down for a racial group is a percentage of *stops* leading to a search beyond pat down. The percentage of contraband found is the percentage of *pedestrian searches beyond pat down* leading to contraband found. For percentages, each row label (or the heading for the panel) indicates the basis for the percentage.

Can stop rates be compared across years?

The methodology used for calculating stop rates in this study (and for 2019-2022 stops) differs from studies of stops in 2018 and earlier. While the new methodology provides more accurate stop rates, the changes make it difficult to compare results from the 2023 stops analysis to the analyses in years prior to 2019. The 2023 stop statistics can be compared to 2021-2022 results as the methodologies are the same. The 2023 stop statistics can also be compared to 2019 and 2020, though there have been some additional changes in methodology starting from 2021 stops, described in the report on 2021 stops.

These and other changes have improved the estimate of the benchmark populations and the accuracy of stop rates. Thus, any difference in rates between 2019-2023 stops reports and earlier stops reports (2018 and earlier) may be at least partly due to a change in methods rather than to a real change in stop

rates. The new methods are intended to estimate the benchmark population more accurately. For example, rate ratios (comparing a minority stop rate to a white stop rate) are more accurate in 2019 and later stops reports than in 2018 and earlier stops reports. Another factor making it difficult to compare 2019-2023 stop rates to 2018 and earlier rates is that the 2019-2023 reports present rates, percentages and rate ratios separately for each of the six individual races — rather than with all minorities combined into one category, as used in the 2018 and earlier reports. Perusal of tables in Part II of this report will show the reader that the five minority races do have different stop rates. The statewide rates in Table 1, Panel 1, above, show a diversity of stop rates among the six races as well as among the five minority races.

Certain percentages will be comparable across years because the percentages are based on stops data only, and percentages are calculated in the same manner as in previous years. However, to compare a percentage based on 2023 stops data to a percentage reported in a year prior to 2019, some additional calculations will be needed. This 2023 stops report and the 2019-2022 stops reports present results for each racial group, whereas reports prior to 2019 combined five races into one group: all minorities. To calculate a percentage for 2023 stops of all minorities, the user will need to add together (across the five minority racial groups) all of the numerators and, separately, all of the denominators and then divide the numerator sum by the denominator sum, then multiply by 100% to get the all-minority groups do have differing rates, percentages and ratios in some jurisdictions.

V. Benchmarks

The number of stops for each racial group and each agency is compared to a benchmark to calculate the agency's stop rate for the racial group. The benchmark provides an estimated population count for each of the six racial groups. These population counts are then compared to the pedestrian stop counts of each racial group to assess and compare the stop rates (stops per unit of population) of each racial group. See Appendix C of last year's report, Technical Notes on Benchmarks, for a detailed discussion of benchmarks and associated calculations, including important limitations.

The methods for calculating the benchmark for each agency for this report are similar to the methods used for the report on 2021-2022 stops, which rely primarily on local population statistics for the associated cities or counties based on data provided by the U.S. Census Bureau. However, the numeric values of the benchmarks for 2023 stops may be different than those for 2021-2022 stops because the underlying population statistics are updated annually to be as up to date as possible. The primary source for population statistics in this report is the 5-year ACS release, the most recent release available.

Please note that the traffic stop and pedestrian stop benchmark methodologies differ due to the different data sources available to generate them. Thus, it is not unusual for there to be notable differences between the traffic and pedestrian benchmarks for the same agency.

VI. **Selected Findings**

This section of the report shows some tables and figures that present results on the agencies and their pedestrian stops from the entire state for 2023. Some results are contrasted with their corresponding 2021 and/or 2022 values.

Agency reporting status

Among the 997 agencies that were active at the end of 2023 and could submit stops data to IDOT, 24.3% of the agencies had stops and provided complete stops data to IDOT (Table 2, top numeric row). A total of 270 agencies had no pedestrian stops (27.1%) and 48.6% of agencies did not submit any stops data ("non-compliant"). The fraction of agencies non-compliant with pedestrian stops submission was about three time larger than the corresponding non-compliant percentage (15.8%) for traffic stops submission.

	2022		2023		
Status of Agency	Number of agencies	Percent of agencies	Number of agencies	Percent of agencies	
Complete reporting ^a	244	24.3%	242	24.3%	
Zero stops ^b	302	30.0%	270	27.1%	
Incomplete ^c	0	0	0	0	
Non-compliant ^d	459	45.7%	485	48.6%	
All agencies combined	1,005	100%	997	100%	
^a Agency with one or more stops that were completely reported. ^b Agency performed no stops over the year.					

Table 2. Agency status on reporting. Illinois, all agencies, Pedestrian stops, 2022 and 2023.

^cAgency submitted some but not all of their stops for the year.

^dAgency made stops, but no stops data were submitted.

Number of stops

The total number of reported traffic or pedestrian stops in 2023 was 2,343,796. Among all of these stops, 83,149 (3.5%) were pedestrian stops and 2,260,647 (96.5%) were traffic stops, or a little over 27 traffic stops per each pedestrian stop. Most agencies with pedestrian stops had very few stops -10 or fewer (71.5% of the 242 agencies with more than zero pedestrian stops reported had fewer than 10 pedestrian stops). The Chicago Police Department reported 78,642 pedestrian stops, which was 94.6% of all the reported pedestrian stops statewide (see the note in Table 3).

	2022		2023	
Number of stops	Number of agencies	Percent of agencies	Number of agencies	Percent of agencies
1-10	178	73.0%	173	71.5%
11-100	58	23.8%	58	24.0%
101-1,000	7	2.9%	10	4.1%
1,001-10,000	0	0	0	0
10,001-100,000	1	0.4%	1	0.4%
More than 100,000	0	0	0	0
All compliant agencies with ≥ 1 stops	244	100%	242	100%

Table 3. Number of Pedestrian stops for agencies with at least one stop. Illinois, all agencies,Pedestrian stops, 2022 and 2023.

Notes:

(1) Includes only agencies with at least one stop and complete reporting of their stops.

(2) Chicago Police: 68,897 pedestrian stops in 2022; 78,642 in 2023. The Chicago pedestrian stops data are included in the table above.

The counts in Figure 1a show that the number of pedestrian stops increased by nearly 30% from 2016 to 2019 while there was a sharp decrease in 2020 when the number of reported stops decreased 45% from the year before. In 2021, the number further decreased 29.5% from 2020. In 2022 there was a minimal 0.5% increase from 2021. In 2023 there was a 14% decrease from 2022, so the downward trend, likely induced by the COVID-19 pandemic, seems to be reversing. However, there is little indication that the numbers will return to their pre-COVID-19 values. This stands in contrast with traffic stops that have to a large extent returned to their pre-COVID-19 values.

Figure 1b shows that the monthly pattern of stops has changed little in the last three years, except that in 2023 it seems more even throughout the year, with less variation across months.



Figure 1a. *Illinois, number of Pedestrian stops*, 2016-2023.

Figure 1b. Illinois, number of pedestrian stops per month, 2021 (light gray line), 2022 (gray line), and 2023 (dark red line).



Statewide rate ratios

The statewide rate ratios are very diverse among the six racial groups (Figure 2). While Asian and Hispanic/Latino groups are comparable with the reference white group, the remaining three groups have their rate ratios notably larger. The Black group stands out with the rate ratio nearly 30 times as large as the white group. The Hispanic/Latino group is approximately eight times as large. The smallest minority group, Native Hawaiian or Other Pacific Islander, has its rate ratio nearly 20 times as large as the White group. However, this may be — at least partially — an anomaly due to a still-persisting mismatch between the officer-identified race of stopped individuals and the self-identified race reported in the U.S. census survey data. These relations between rate ratios remained largely constant within the last three years.

Figure 2. Rate ratios for each racial group, 2021 (light gray bars), 2022 (gray bars), and 2023 (dark red





Distribution of stop rate ratios

Table 4 shows the numbers of comparisons of stop rates of a minority racial group and whites carried out in the pedestrian stops study. Any comparison yields a rate ratio — the minority stop rate divided by the white stop rate. Each agency might contribute up to five such comparisons (five minority groups, each compared to whites on their stop rates). There would be fewer than five comparisons when one or more of the racial groups had zero stops in an agency.

The first column under "A" in Table 4 shows the counts of all comparisons (each minority/white rate ratio and all the ratios compiled across all agencies and then categorized in Table 4 by the magnitude of

the rate ratio). The columns under "B" restrict the comparisons to those based on at least 10 white stops and 10 stops of the minority group compared. Having at least 10 stops provides a more precise estimate of the rate ratio than a smaller number of stops.

There is a drastic reduction — 24-fold from Panel A to Panel B — in the total number of rate ratios, from 956 (all comparisons) down to only 40 (more precise comparisons). This reduction comes mainly from eliminating the smallest ratios. From the more precise comparisons (Panel B, based on 10 or more stops of whites and 10 or more stops of the minority group compared), it is estimated that in 70% of these rate ratios, minority pedestrians were stopped more than the white pedestrians relative to their proportion in the benchmark population (rate ratio > 1). This suggests (as a possibility but does not prove) that racial profiling was a factor in a number of pedestrian stops. The overall distribution between categories seems fairly robust with time, without much change from 2022 into 2023. The 95% confidence intervals provided in the tables of Part II should be used as a guide to the precision of rates, percentages and rate ratios when interpreting the numeric results. There are not enough pedestrian stops to extend this analysis to particular racial groups as performed for the traffic stops report.

	A. All agencies and racial groups*		B. Agencies and with a	I the racial groups t least 10 stops**
Rate ratios	2022	2023	2022	2023
<0.25	77.8%	77.3%	0	2.5%
0.25 to <0.5	1.3%	1.5%	2.8%	7.5%
0.5 to <1.0	2.8%	3.2%	19.4%	20.0%
1.0 to <2.0	2.9%	3.6%	19.4%	20.0%
2.0 to <4.0	4.5%	3.6%	25.0%	12.5%
≥4.0	10.6%	10.9%	33.3%	37.5%
All ratios***	100%	100%	100%	100%

Table 4. Distribution of pedestrian stop rate ratios. (Each non-white racial group compared to whites for an agency). Illinois, pedestrian stops, 2022 and 2023.

* All comparisons of whites and a racial group for all agencies. Excludes ratios from agencies with zero stops of white pedestrians or a benchmark population value of zero for either racial group.

** All comparisons of whites and a racial group for all agencies; all comparisons must have at least 10 stops of whites and 10 stops of the compared racial group. Excludes ratios where either whites or the compared racial group have less than 10 stops.

***The number of ratios (each involve a comparison of one non-white racial group vs. white for one agency) that were included in the analysis in columns A and B respectively, were 997 and 36 in 2022; 956 and 40 in 2023.

Searches and Contraband

Figure 3 shows that the rate of search beyond a pat down is substantial for all of the racial groups (approximately 19%-47% of stops, left panel), and, given a search beyond pat down, the yield of

contraband is also substantial (approximately 29%-58% of searches beyond a pat down, right panel). There is diversity among the races' percentages in both panels. Focusing on three largest racial groups (white, Black, HL) having substantial numbers of stops (over 1000), the white group is:

- the least frequently stopped, its rate ratio being the smallest (see Figure 2);
- when stopped, it is least frequently searched;
- when stopped and then searched, the contraband is least frequently found.



Figure 3. *Percentage of pedestrian stops with a search beyond pat down*. Percentage of searches beyond pat down with contraband found. Illinois, pedestrian stops, 2023.

Abbreviations for racial groups: Black = "Black or African American", HL = "Hispanic or Latino", AIAN = "American Indian or Alaska Native", NHOPI= "Native Hawaiian or Other Pacific Islander".

VII. Considerations for Interpreting the Data

In 2023, nearly half of all agencies (49%) were non-compliant in reporting their pedestrian stops, although that is a noticeable reduction from 2021 (59%). This substantial level of non-compliance raises some concern about results based on pooling compliant agencies together, such as in tables and figures of this "Selected Findings" section. Are the pooled compliant agencies representative of the whole State of Illinois and all its law enforcement agencies? Again, the Chicago Police Department counts for 95% of all pedestrian stops.

A considerable number of agencies have a relatively small number of stops for one or more of the racial groups. The limited stop counts yield a wide 95% confidence interval, which means high uncertainty in the corresponding rate, percentage or ratio for the agency. The uncertainty from potential benchmark

issues (discussed earlier) or race classification issues (also discussed earlier) add to the uncertainty implied by the confidence intervals. Any investigation of racial profiling that is initiated based on this report should consider all of the sources of uncertainty.

In Part II of this report (agency tables), each agency has ratios of rates or ratios of percentages. Some of them are bolded as a "statistical deviation." The bolded ratios and their meaning and interpretation are topics covered elsewhere in this report. In addition to whether or not a ratio is bolded, the absolute magnitude of the ratio should be considered when interpreting the results, as discussed earlier.

If a ratio is not bolded, it does not prove that there is no racial profiling in the agency. It is worth looking at the upper and lower bound of the 95% confidence interval to see what the uncertainty is. That interval quantifies the uncertainty and shows the largest ratio and the smallest ratio that are plausible, given the data.

For example, consider a ratio of **1.0** for a specific minority percentage of stops with a search, compared to the corresponding white percentage of stops with a search for a particular agency. The ratio of 1.0 indicates that the percentage of stops with a search was the same for both the whites and for the specific minority group. However, the counts of searches are very small in this example, and the 95% confidence interval for the ratio is **0.025** up to **5.8**. (This is similar to an actual agency result.) That is, it is plausible that the true search percentage of the minority group is anywhere from one-fortieth of the White percentage up to almost six times the White percentage.

Clearly, in a case like the one described above, not enough is known about the ratio to draw any conclusion except that it is uncertain. Thus, a confidence interval for a ratio that includes 1.0 and is very wide (encompassing values well above the calculated ratio and also well below the ratio) usually means that presence or absence of potential racial profiling cannot be determined from the data in hand.

Lastly, while there is a considerable focus on the stop rate ratios reported in Panel 1 of the tables in Part II of this report (detailed tables), the other panels provide valuable complementary information on the outcomes of stops and how the outcome statistics compare between racial groups. As noted earlier, the stop outcome results are compared among individuals who were stopped and do not rely on any external population benchmark. This avoids some limitations of benchmarks. Ultimately, stop results for an agency should be interpreted holistically, considering all panels together; different panels may suggest different interpretations when viewed individually.

VIII. Looking Ahead

The study team continues to review the current statistical methodology and consider refinements and improvements. See the "Looking Ahead" section of Part I (Executive Summary) of the traffic report.

Appendix A. Pedestrian Stop Data Collection Form in Use during 2023

Illinois Departme	មាt Pedestrian N	Stop Data Sheet	
Agency Code			
Date of Stop (MM/DD/YYYY)	Time of Stop (Military Time)	Officer Name	
Officer Badge Number	Location of Stop	Beat Location o	f Stop
iender Male 2 Female ace White 2 Black or Afric Asian 6 Native Hawa	can American 3	an or Alaska Native 4 🗌 Hispanic d	or Latino
	Reason for	Stop	
asson for Stop (Check all that a Actions indicative of engaging Fits description of an offender Proximity to the reported crim Other (Specify)	in drug transaction 2 Fits des as described by victim or witness e location 6 Gang related enfo	acciption from radio broadcast / Call for set 4 Actions indicative of "casing" victim orcement 7 Suspicious Activity	or location
	Pat Down/Fi	rick	
Verbal threats of violence by Actions indicative of engaging Suspicious bulge/object Other reasonable suspicion o a Pat Down/Frisk was conducted,	suspect 2 Knowledge of susp i in violent behavior 4 Violent 6 Evasive, false or inconsister f weapon (Specify) did it lead to a search beyond the pat	t down/frisk? 1 Yes 2 No	of force/use of weapon
	Search Beye	ond	
earch Beyond Pat Down/Frisk C	onducted? Search Beyond 1 Consent	Conducted By 2 Probable Cause 3 Search	Incident to Arrest
eason for Search Beyond (Chec Drugs or drug paraphernalia Other weapon found during p	k all that apply) ound 2 Hard object felt du at down 5 Other probable ca	uring pat down 3 S Firearm for	und during pat down
a Search Beyond a Pat Down/Fris yes, what was found? Drugs 2 Drug Paraphen the contraband found was drugs, <2 grams 2 2-10 gram	k was conducted, was contraband found nalia 3 Alcohol 4 Weapor what was the amount? s 3 11-50 grams 4 51-10	und? 1 Yes 2 No n 5 Stolen Property 6 Other 00 grams 5 >100 grams	3
Varning/Citation Issued 1	Outcome of es 2 No Arre	Stop	Yes 2 🗌 No
/iolations/Charges			
Printed 05/19/20			BDC 802 (Rev. 02/21/ Fomerly TS 8

Appendix B. Technical Notes on Rates, Percentages and Ratios

B.1. Overview

This technical appendix includes a detailed explanation of the rate, post-stop outcomes and ratio calculations used in constructing the statewide and agency tables for pedestrian stops. The tables appear in Part II of this report. It is explained how comparisons of each minority group to white pedestrians are carried out. It is also explained how the confidence interval is calculated based on known sources of uncertainty in the data¹. Further, this section describes how an agency may be designated (by a bold font in the tables) as potentially standing out beyond an assumption of no racial profiling. An agency that is designated as standing out might use this report as a basis for further inquiry. As stated elsewhere and repeated here, there is nothing in this report that proves an agency is practicing racial profiling. Some limitations for interpreting the findings are provided based on the available data and methods.

B.2. Stop rates, post-stop outcomes, and ratio calculations

Calculations for the entire state and for each agency were performed.

B.2.1. Stop rates and rate ratios

Stop rates were calculated separately for each racial group by dividing the number of stops in the racial group by the benchmark estimate of the pedestrian population in the racial group. (A description of the methods used to estimate the benchmark populations is included in Appendix C of last year's report.)

The number of stops was assumed to follow a Poisson distribution, used in previous examination of racial disparities in traffic stops (Gelman et al. 2007, Ridgeway 2007) and calculated 95% confidence intervals for the rates using exact methods (Garwood 1936). When the benchmark estimate of the population was zero, no rate or confidence interval could be calculated. A benchmark population of zero for a specific minority group happens when the census population estimate for the minority is zero.

Each minority group was compared to white pedestrians using the ratio of the minority group stop rate to the white group stop rate. A 95% confidence interval was calculated for each rate ratio by conditioning on the sum of the numbers of stops in the two racial groups being compared. Assuming the number of stops in each group followed a Poisson distribution, conditioning on the sum of the number of stops creates a binomial variable, and an exact confidence was calculated using binomial methods (Lehmann and Romano 2005). If it was impossible to calculate a rate because of a zero benchmark, or if the number of stops in the white group was zero, no rate ratio or confidence interval was reported.

A rate ratio of 1.0 indicates the minority group and white pedestrians had equal rates of stops. If the 95% confidence interval lies entirely above 1.0, the rate ratio is statistically significantly greater than 1.0 and may require agency inquiry. These statistically significant rate ratios are bolded in the summary tables. These bolded ratios are statistical deviations, and the basis for further consideration of potential racial disparities. Comparisons of minority groups to white pedestrians where the 95% confidence lies below 1.0 are not bolded because the intent of this study is to identify potential racial profiling that discriminates against minority pedestrians.

¹ The estimated benchmark population is an example of a component of the methodology that has uncertainty that could not be quantified for this study. Benchmark technical details are included in Appendix C.

For all calculations, it was assumed that the benchmark accurately captured the population of pedestrians. The benchmark used to calculate each rate is itself an estimate of the population of pedestrians for a racial group. Confidence intervals of rates and rate ratios assumed only sampling error and thus do not account for this additional source of error in benchmark estimates. Accounting for benchmark error would increase the width of the confidence intervals reported for rates and rate ratios and would likely reduce the number of agencies that appear to stand out as needing further inquiry.

B.2.2. Post-stop outcomes

Post-stop outcome percentages (such as searches) were calculated separately for each racial group. Table B1 shows the type of numerator and denominator used to calculate each percentage shown in the pedestrian tables.

Outcome	Numerator	Denominator				
CATEGORY: Pat Downs and Searches Beyond Pat Down						
Pat down	Number of pat downs	Number of stops				
Search beyond pat down	Number of searches beyond pat down	Number of stops				
Contraband found	Number of searches beyond pat down where contraband was found	Number of searches beyond pat down				
CATEGORY: Outcomes of Stop						
Warning/Citation	Number of warnings/citations	Number of stops				
Custodial Arrest	Number of custodial arrests	Number of stops				

Table B1. Numerators and denominators for pedestrian stop outcomes.

It was assumed that percentages follow a binomial distribution and can be approximated by a Poisson distribution (Serfling 1978), and confidence intervals for the rates were calculated using exact methods (Garwood 1936). When the denominator of the percentage was zero (for example, an agency had a benchmark of zero for a specific racial group), no percentage or confidence interval could be calculated.

For selected outcomes each minority group was compared to white pedestrians using the ratio of the minority group percentage to the white group percentage. A 95% confidence interval for each ratio was calculated using exact methods (Lehmann and Romano 2005). If it was impossible to calculate a percentage because of a zero denominator, or if the numerator of the White group percentage was zero, no ratio or confidence interval was reported.

B.3. Limitations

For all calculations, it was assumed that the pedestrian was assigned to the correct racial group. However, an officer's assessment of the race of a pedestrian may be in error. Because police officers made the racial group assignment, there is a potential misclassification bias of pedestrians. If misclassification resulted in a minority pedestrian frequently being categorized in a different minority group, the stop rates of some minority groups may be underestimated, while others are overestimated. Consequently, the rate ratios of some minority groups may be underestimated while others are overestimated. This is a limitation that would be difficult to correct based on the available information.

Some of the alerts to rate ratios (**bolded font** in the tables) may be "false positives." This can happen as follows. Within the statewide or individual agency tables for pedestrian stops, five minority group comparisons with the white group were calculated. There were five of these comparisons for each ratio analysis. For example, there are five ratios comparing the stop rate for each of the five minorities to the stop rate for whites². Thus, five 95% confidence intervals were constructed — one each for the five stop-rate ratios. That is, each agency was checked for profiling in each of five minority groups. For each minority comparison with white pedestrians there was the potential to make a type I error. That is, the potential need for inquiry for profiling may have been, by chance, incorrectly indicated. While a 5% type I error rate for each minority comparison was set, the multiple comparisons inflate the possibility of making such an error overall to more than 5%. It was chosen not to correct for these multiple comparisons, viewing each minority comparison to whites as an independent examination of profiling.

References (for Appendix B)

Garwood, F (1936). Fiducial limits for the Poisson distribution. Biometrika, Vol. 28, Issue 3-4: 437-442.

Gelman, A, Fagan, J, and Kiss, A (2007). An analysis of the New York Police Department's 'stop-and-frisk' policy in the context of claims of racial bias. Journal of the American Statistical Association, Vol. 102, No. 479, 813–823.

Lehmann, EL, and Romano, JP (2005). Testing Statistical Hypotheses, Third edition. Springer: New York.

Ridgeway, G. (2007). Analysis of Racial Disparities in the New York Police Department's Stop, Question, and Frisk Practices. Santa Monica, Calif.: RAND Corp.

https://www.rand.org/pubs/technical_reports/TR534.html.

Serfling, RJ (1978). Some elementary results on Poisson approximation in a sequence of Bernoulli trials. SIAM Review, Vol. 20, No. 3, 567-579.

² There may be fewer than five ratios depending on the occurrence of zero stops for Whites or zero benchmark for a Minority. These are cases where a ratio cannot be calculated.

Appendix C. Technical Notes on Benchmarks

C.1. Overview

In the analysis of potential racial profiling, the number of stops by each agency of each racial group is compared to a benchmark population of the racial group. The rate of stops per benchmark population for the racial group can be compared to the same rate for whites. The benchmark provides an expected racial distribution of the local population of drivers.

This distribution would be approximately equal to the expected racial distribution of the stops if the stops were conducted in a completely randomized way, blind to the race and behavior of the driver. That is, the stop rates calculated using a perfectly accurate benchmark would be approximately constant across all racial groups if there were no profiling and if there were no difference in the general behavior of drivers across all racial groups.

This report shares the same methodology of calculating the benchmarks as the previous year's report. The only difference is that the data sources were updated to their most recent available versions and that there were some changes in the selection of data sources to be used this year. Details on this are covered below. Details on how racial categories were defined, how benchmark regions were determined (and other benchmark calculations), the differences in benchmark methodology employed now compared with prior years, and limitations and strengths of the methodology are described at length in the Appendix C of the previous year's report (on 2022 stops).

C.2. Data Sources

Multiple data sources were combined to calculate benchmarks, including multiple datasets provided by the U.S. Census Bureau. The datasets used include those from the decennial census, the American Community Survey and Gazetteer files, depending on the year and type of benchmark (traffic stops or pedestrian stops).

The ACS is an ongoing survey conducted by the U.S. Census Bureau that collects information on the U.S. population in all 50 states, the District of Columbia and Puerto Rico³. The information collected is similar to that collected during the U.S. decennial census, but the ACS results are released on an annual basis rather than every 10 years. Another difference between the ACS and census is that the ACS is based on a random sample of about 3.5 million individuals while the census attempts to reach every person living in the U.S. and its territories.

Besides the yearly ACS releases, there are also five-year releases. These releases combine five consecutive years, primarily to increase the sample size of relatively small areas or groups of individuals. It would be challenging to estimate the population of small communities reliably with only one survey-year of data. In addition to standard tabulations, the ACS also provides individual-level data, referred to as the public use microdata sample The PUMS data allow more detailed and complex analyses involving multiple variables. Due to privacy concerns, there are restrictions on the level of geographic identification provided with each type of ACS data release.

³ <u>https://www.census.gov/programs-surveys/acs</u>. Last accessed 5/15/22.

The Gazetteer files provide geographic information, such as geographic area, latitude and longitude, for different relevant regions in the U.S., including ZIP codes, places (a city, town, or village, referred to simply as city hereafter), counties and states⁴. These files are updated annually.

The U.S. Census Bureau approximates ZIP codes (defined by the U.S. Postal Service) with ZIP code tabulation areas⁵. Throughout this report, the term "ZIP code" will be used to refer both to ZCTAs and U.S. Postal Service ZIP code for simplicity.

Table C.1 lists the U.S. Census Bureau datasets used for different purposes, for both traffic and pedestrian stop benchmarks. Of note, as can be seen from the table, this year the same datasets were used for traffic and pedestrian benchmarks.

Information Needed	Traffic Stop Benchmarks	Pedestrian Stop Benchmarks	
Age distribution in Illinois	1Y ACS PUMS 2022	N/A	
Age distribution by race/ethnicity*	5Y ACS PUMS 2018-2022	5Y ACS PUMS 2018-2022	
Individual race groups to reallocate residents with more than one race*	5Y ACS PUMS 2018-2022	5Y ACS PUMS 2018-2022	
Population counts for each race/ethnicity			
By ZIP code†	5Y ACS 2018-2022	5Y ACS 2018-2022‡	
By city	N/A	5Y ACS 2018-2022	
By county	N/A	5Y ACS 2018-2022	
For Illinois	N/A	5Y ACS 2018-2022	
Geographic area of each city in Illinois	Gazetteer Files 2023	N/A	
Geographic area of each county in Illinois	Gazetteer Files 2023	N/A	
Latitude and longitude of each ZIP code	Gazetteer Files 2023	N/A	

Table C1. U.S. Census Bureau datasets used for benchmarks.

1Y = 1-year; 5Y = 5-year; ACS = American Community Survey; PUMS = public-use microdata sample; *Includes Illinois and 24 states within 400 miles of Illinois; †ZIP codes approximated using ZIP code tabulation areas (ZCTAs) defined by the U.S. Census Bureau; ‡ZIP-code-level data was used for Chicago Police District benchmarks.

The 5Y ACS PUMS was used for city-, county- and state-level population statistics instead of the decennial datasets, because they are now equally recent (2018-2022 versus 2020), and ACS will become more recent in the coming years until a new decennial update is available. The 5Y ACS PUMS was also used to estimate the age distribution of each race/ethnicity group.

⁴ <u>https://www.census.gov/geographies/reference-files/time-series/geo/gazetteer-files.html</u>. Last accessed 5/14/22.

⁵ <u>https://www.census.gov/programs-surveys/geography/guidance/geo-areas/zctas.html</u>. Last accessed 5/21/22.

Appendix D. Additional Notes on Illinois Law Concerning the Stop Study

The Illinois General Assembly has promulgated laws that require the collection and analysis of data on traffic and pedestrian stops by Illinois law enforcement agencies. See the Compiled Statutes of the Illinois General Assembly, 625 ILCS 5/11-212, effective 6/21/2019. See also Public Act 101-0024.

Section 11-212 of the Illinois statute authorizes the "traffic and pedestrian stop statistical study". This section also requires that when a police officer stops an individual, a specific set of information is to be recorded. This information includes name, address, gender, race (six specific categories: white, Black or African American, Hispanic or Latino, Asian, American Indian or Alaska Native and Native Hawaiian or Other Pacific Islander), the violation, vehicle information, date, time, location, search information, whether contraband was found, disposition of the stop (warning, citation or arrest—arrest recorded only for pedestrian stops⁶) and the name and badge number of the officer. This information is to be obtained whether the police officer makes a traffic stop or a pedestrian stop and either issues a citation or a warning (or arrest for a pedestrian stop). In addition, the length of the contact in minutes is to be recorded for traffic stops. These data are recorded using the data collection form included in Appendix A. The law further specifies that the collected data are to be sent to the Illinois Department of Transportation by a specific date each year for the stop data collected in the preceding year.

The Illinois Department of Transportation is further directed by statute to analyze the data and submit summary reports to the Governor, the General Assembly, and the Racial Profiling Agency. IDOT is authorized to contract with an outside entity for the analysis of the data. That analysis is the purpose of this report. Moreover, the reporting entity is directed to scrutinize the data for evidence of "statistically significant aberrations." An illustrative list of possible aberrations recorded in the statute include: (1) a higher-than-expected number of minorities stopped, (2) a higher-than-expected number of citations issued to minorities, (3) a higher-than-expected number of minorities stopped by a specific police agency, and (4) a higher-than-expected number of searches conducted on minority drivers or pedestrians.

⁶ The pedestrian stop data collection form in use during 2023 has provision for recording an arrest. The traffic stop data collection form in use during 2023 does not provide a means of recording an arrest.