ILLINOIS

TRAFFIC AND PEDESTRIAN STOP STUDY

2022 ANNUAL REPORT PEDESTRIAN STOP ANALYSIS SUBMITTED BY THE MOUNTAIN-WHISPER-LIGHT: STATISTICS AND DATA SCIENCE







Illinois Traffic and Pedestrian Stop Study

2022 ANNUAL REPORT: PEDESTRIAN STOP ANALYSIS

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.



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Executive Summary

I. Background

In October 2019, The Mountain-Whisper-Light, Inc., aka The Mountain-Whisper-Light: Statistics & Data Science, 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 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 and 2021 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), analyzing the data and submitting a report of the previous year's findings to the governor, General Assembly, Racial Profiling Prevention and Data Oversight Board, and each law enforcement agency no later than July 1 of each year. In May 2023, TMWL and SC-B, in cooperation with IDOT's Bureau of Data Collection, provided copies of statistical tables to 794 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. The agencies were invited to review and comment on the tables. Some agencies did provide comments, and those comments are included with their tables in Part II of this report. We have responded to some comments with additional information, and the readers of this report may wish to peruse the agency comments and our responses. Twelve agencies provided comments on traffic tables or both traffic and pedestrian tables. We have provided responses to comments from the Glencoe Department of Public Safety, Gurnee Police Department and Normal Police Department on their traffic stops tables, and we have provided a response to comments from the Gurnee Police Department on their pedestrian stops tables. Comments on the traffic stops tables (or general comments) and comments on the pedestrian stops tables are included in the Part II traffic or pedestrian tables, respectively.

We are pleased to submit this report on 2022 pedestrian stops for the Illinois Traffic and Pedestrian Stop Study.

II. Introduction

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 2022). 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. We also include an Interpretation section 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 is the source 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, we are submitting two separate reports, 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 is an instruction manual that accompanies the traffic stops data collection form available online at

http://www.idot.illinois.gov/Assets/uploads/files/Transportation-System/Pamphlets-&-Brochures/Safety/2012TrafficStopDataSheetInstructions.pdf.

How were the data analyzed?

The results of the data collection on pedestrian stops are that 244 agencies generated data on 72,960 pedestrian stops in 2022. Among these 244 agencies, 243 of the agencies also provided data on traffic stops. One of the 244 agencies provided pedestrian stop data only — without any traffic stop data. None of the reported pedestrian stops were 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
- Outcome of the stop
- Pat down/frisk or search activity and findings of contraband

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 for those who may not be familiar with them.

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 determine the possibility of racial profiling. The word "possibility" is very important, because racial profiling cannot be <u>proved</u> by the numeric results in this report. Some of the inherent uncertainties and limitations of the statistics are explained later.

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 2022 for the state of Illinois. The counts, rates, percentages and ratios are for purposes of illustration only and are <u>not</u> 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 2022 there were 16,186 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 2022 was 1,839,445. (As discussed later, individuals aged 12-80 in Illinois are considered to have a non-negligible risk of being stopped.) Dividing the 16,186 by 1,839,445 yields the stop rate of 0.0088. That is, there was an average of 0.0088 stops per member of the Hispanic or Latino population age 12-80. The decimal value 0.0088 does <u>not</u> mean that 0.83% 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 2022 there were 7,474 stops of pedestrians whom the officer assigned to the category "White." There were 1,819 of those stops with a pat down. The number of pat downs, 1,819, divided by the number of stops, 7,474, yields the decimal fraction 0.24. That fraction represented as a percentage is 24%. In Illinois in 2022, 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 of Illinois. 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 2022 - ILLINC | IS STATEWIDE RESULTS | | | Bend | chmark: 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 Pedestrian Stops, Rates, and Rate Ratios with 95% Confidence Intervals. Total stops: 72,960. Total benchmark population: 10,535,359. | | | | | | |
| Stops (% of Total) | 7,474 (10%) | 48,354 (66%) | 16,186 (22%) | 762 (1%) | 80 (0.1%) | 104 (0.1%) |
| Benchmark (% of Total) | 6,432,649 (61%) | 1,516,278 (14%) | 1,839,445 (17%) | 677,808 (6.4%) | 63,372 (0.6%) | 5,807 (0.06%) |
| Stop Rate (95% Confidence Interval) | 0.00116 (0.00114 - 0.00119) | 0.0319 (0.0316 - 0.0322) | 0.0088 (0.0087 - 0.0089) | 0.0011 (0.001 - 0.0012) | 0.0013 (0.001 - 0.0016) | 0.018 (0.015 - 0.022) |
| Stop Rate Ratio vs White (95% Confidence Interval) | 1.0 | 27.4 (26.8 - 28.1) | 7.6 (7.4 - 7.8) | 0.97 (0.9 - 1) | 1.1 (0.86 - 1.4) | 15 (13 - 19) |
| Panel: 2 Summary of Pat D | Down Events - Number (Per | centage for the Racial Group) | [95% Confidence Interval] | · | | |
| Pat Down (% of Stops) | 1,819 (24%) [23% - 25%] | 20,006 (41.4%) [40.8% - 42%] | 5,787 (36%) [35% - 37%] | 190 (25%) [22% - 29%] | 21 (26%) [16% - 40%] | 38 (37%) [26% - 50%] |
| Search Beyond Pat Down (% of Stops) | 1,945 (26%) [25% - 27%] | 23,403 (48.4%) [47.8% - 49%] | 7,177 (44%) [43% - 45%] | 190 (25%) [22% - 29%] | 19 (24%) [14% - 37%] | 28 (27%) [18% - 39%] |
| Contraband Found (% of Searches, preceding row) | 624 (32%) [30% - 35%] | 10,764 (46%) [45% - 47%] | 3,373 (47%) [45% - 49%] | 64 (34%) [26% - 43%] | 9 (47%) [22% - 90%] | 12 (43%) [22% - 75%] |
| Contraband Found Ratio vs White (95% Confidence Interval) | 1.0 | 1.4 (1.3 - 1.6) | 1.5 (1.3 - 1.6) | 1 (0.8 - 1.4) | 1.5 (0.67 - 2.8) | 1.3 (0.69 - 2.4) |

| | White | Black or African American | Hispanic or Latino | Asian | American Indian or Alaska Native | Native Hawaiian or Other Pacific Islander |
|---|----------------------------------|-----------------------------------|-----------------------------|-----------------------------|-------------------------------------|--|
| Panel: 3 Summary of Outc | ome of Stop - Number (F | Percentage of All Stops for the F | Racial Group with the Noted | l Outcome of the Stop) [95% | 6 Confidence Interval] | · |
| Warning/Citation | 1,944 (26%) [25% - 27%] | 3,272 (6.8%) [6.5% - 7%] | 1,365 (8.4%) [8% - 8.9%] | 90 (12%) [9.5% - 15%] | 7 (8.8%) [3.5% - 18%] | 8 (7.7%) [3.3% - 15%] |
| Custodial Arrest | 1,011 (13.5%) [12.7% - 14.4%] | 8,023 (16.6%) [16.2% - 17%] | 1,941 (12%) [11% - 13%] | 67 (8.8%) [6.8% - 11%] | 6 (7.5%) [2.8% - 16%] | 13 (12%) [6.7% - 21%] |
| Custodial Arrest Ratio vs White (95% Confidence Interval) | 1.0 | 1.2 (1.1 - 1.3) | 0.89 (0.82 - 0.96) | 0.65 (0.5 - 0.83) | 0.55 (0.2 - 1.2) | 0.92 (0.49 - 1.6) |

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 (one) 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 persons 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, thus, 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 2019-2021 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 2022 stops analysis to the analyses in years prior to 2019. The 2022 stop statistics can be compared to 2021 results as the methodologies are the same. The 2022 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 that report.

These and other changes have improved the estimate of the benchmark populations and the accuracy of stop rates. Thus, any difference in <u>rates</u> between 2019-2022 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. Another factor making it difficult to compare 2019-2022 stop rates to 2018 rates (and earlier) is that the 2019-2022 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, and, also, 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 2022 stops data to a percentage reported in a year prior to 2019, some additional calculations will be needed. This 2022 stops report and the 2019-2021 stops reports present results for each racial group, whereas reports prior to 2019 combined five races into one group: all minorities. In order to calculate a percentage for 2022 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 allminority percentages. As noted earlier, this report presents results for each racial group separately, since the 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" in order 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 this 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 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 2022 stops may be different than those for 2021 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 2020 decennial census, the most recent release available.

Please note that the traffic stop and pedestrian stop benchmark methodologies differ because of 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 of Illinois for 2022. Some results are contrasted with their corresponding 2021 values.

Agency reporting status

Among the 1,005 agencies that could submit stops data to IDOT, 23.7% of the agencies had stops and provided complete data for 2021 stops to IDOT (Table 2, top numeric row). A total of 174 agencies had no pedestrian stops (17.3%) and 59% of agencies did not submit any stops data ("Noncompliant"). The fraction of agencies noncompliant with pedestrian stops submission was close to three times larger than the corresponding noncompliant percentage (21.6%) for traffic stops submission.

| | 20 | 21 | 20 | 22 |
|---|--------------------|---------------------|--------------------|---------------------|
| Status of Agency | Number of agencies | Percent of agencies | Number of agencies | Percent of agencies |
| Complete reporting ¹ | 238 | 23.7% | 244 | 24.3% |
| Zero stops ² | 174 | 17.3% | 302 | 30.0% |
| Incomplete ³ | 0 | 0 | 0 | 0 |
| Noncompliant ⁴ | 593 | 59.0% | 459 | 45.7% |
| All agencies combined | 1,005 | 100% | 1,005 | 100% |
| ¹ Agency with one or more stops that were completely reported. ² Agency performed no stops over the year. ³ Agency submitted some but not all of their stops for the year. | | | | |

| Table 2. Agency status on | reporting, Illinois, all agencies, I | Pedestrian stops, 2021 and 2022. |
|---------------------------|--------------------------------------|----------------------------------|
| | | |

³Agency submitted some but not all of their stops for the year.

⁴Agency made stops, but no stops data was submitted.

Number of stops

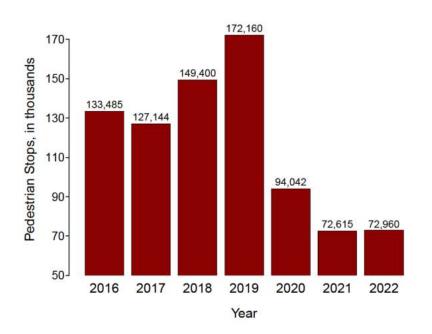
The total number of reported pedestrian stops in 2022 was 72,960. Most agencies with pedestrian stops had very few stops — 10 or fewer (73% of the 238 agencies with more than zero stops reported). See Table 3. The count of reported pedestrian stops (72,960) was 3.6% as large as the count of reported traffic stops (2,012,124). The Chicago Police Department reported 94.4% of all the pedestrian stops.

| | 20 | 21 | 20 | 22 |
|---|------------------------------|------------------------|-----------------------|------------------------|
| Number of stops | Number of agencies | Percent of agencies | Number of agencies | Percent of agencies |
| 1-10 | 177 | 74.4% | 178 | 73.0% |
| 11-100 | 53 | 22.3% | 58 | 23.8% |
| 101-1,000 | 7 | 2.9% | 7 | 2.9% |
| 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 | 238 | 100% | 244 | 100% |
| Notes: (1) Includes only agencies with at lea (2) Chicago Police: 68,556 pedestria pedestrian stops data are included in | in stops in 202 ⁻ | 1; 68,897 in 20 | | |

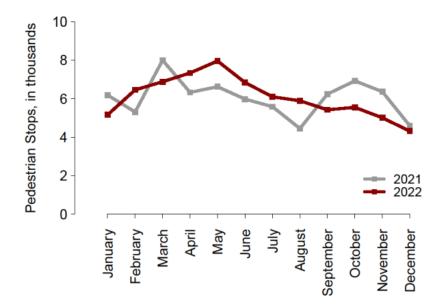
Table 3. Number of Pedestrian stops for agencies with at least one stop. Illinois, all agencies,Pedestrian stops, 2021 and 2022.

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. The downward trend, likely induced by the COVID-19 pandemic, has stopped. However, there is little indication that the numbers will return to their pre-COVID-19 pandemic values.

Figure 1a. Illinois, number of Pedestrian stops, 2016-2022.



The monthly pattern of stops has changed little from 2021 into 2022. Apart from perhaps a small midyear increase and end of the year increase, these trends seem largely the same.





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.

We note a drastic reduction — nearly 30-fold from Panel A to Panel B — in the total number of rate ratios, from 997 (all comparisons) down to only 36 (more precise comparisons), and that 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) we estimate that in 77.8% 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 2021 into 2022. 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 the with at least 10 st | • • |
|------------------------------------|-------|-------|---|-------|
| Rate ratios | 2021 | 2022 | 2021 | 2022 |
| <0.25 | 79.5% | 77.8% | 0 | 0 |
| 0.25 to <0.5 | 1.1% | 1.3% | 8.8% | 2.8% |
| 0.5 to <1.0 | 2.8% | 2.8% | 17.6% | 19.4% |
| 1.0 to <2.0 | 4.2% | 2.9% | 20.6% | 19.4% |
| 2.0 to <4.0 | 3.3% | 4.5% | 23.5% | 25.0% |
| ≥4.0 | 9.1% | 10.6% | 29.4% | 33.3% |
| All ratios*** | 100% | | 100% | |

Table 4 Distribution of Pedestrian stop rate ratios. (Each non-White racial group compared to Whites for an agency). Illinois, Pedestrian stops, 2021 and 2022.

*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 1,015 and 34 in 2021; 997 and 36 in 2022.

Searches and Contraband

Figure 2 shows that the rate of search beyond a pat down is substantial for all of the racial groups (approximately 24-48% of stops, left panel), and, given a search beyond pat down, the yield of contraband is also substantial (approximately 32-47% of searches beyond a pat down, right panel). There is diversity among the races' percentages in both panels.

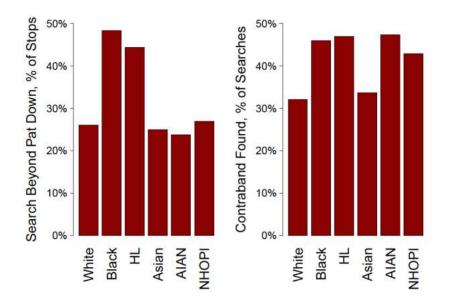


Figure 2. Percentage of Pedestrian stops with a search beyond pat down. Percentage of searches beyond pat down with contraband found. Illinois, Pedestrian stops, 2022.

VII. Some General Comments

In 2022, nearly half of all agencies (46%) were noncompliant in reporting their pedestrian stops, although that is a noticeable reduction from 2021 (59%). This substantial level of noncompliance 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? 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 <u>prove</u> 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.

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."

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 — in 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, we do not know enough about the ratio to draw any conclusion except that we are 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 that 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 Mountain-Whisper-Light is continuing 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 2022

| of Transportation | | | |
|---|---|---|------------------|
| Date of Stop (MM/DD/YYYY) | Time of Stop (Military Time) | Officer Name | |
| Officer Badge Number | Location of Stop | Beat Location of Stop | |
| <u> </u> | can American 3 🗌 American India alian or Other Pacific Islander | an or Alaska Native 4 🗌 Hispanic or Latir | ю |
| eason for Stop (Check all that a Actions indicative of engagin Fits description of an offender Proximity to the reported crim Other (Specify) | g in drug transaction 2 🗌 Fits desc r as described by victim or witness 4 | cription from radio broadcast / Call for service | ation |
| at Down/Frisk Conducted? 1 [eason for Pat Down/Frisk (Che | ck all that apply) | Conducted by 1 Consent 2 Reas | |
| at Down/Frisk Conducted? 1 [eason for Pat Down/Frisk (Cher Uverbal threats of violence by Actions indicative of engagin Suspicious bulge/object Other reasonable suspicion of | Yes 2 No Pat Down/Frisk ck all that apply) suspect 2 Knowledge of suspe g in violent behavior 4 Violent of 6 Evasive, false or inconsistent | Conducted by 1 Consent 2 Reas ect's prior criminal violent behavior/use of force crime suspected t response to officer's questions | |
| at Down/Frisk Conducted? 1 [eason for Pat Down/Frisk (Cher Uverbal threats of violence by Actions indicative of engagin Suspicious bulge/object | Yes 2 No Pat Down/Frisk kall that apply) suspect 2 Knowledge of susper g in violent behavior 4 Violent of 6 Evasive, false or inconsistent of weapon (Specify) | Conducted by 1 Consent 2 Reas ect's prior criminal violent behavior/use of force crime suspected t response to officer's questions down/frisk? 1 Yes 2 No | sonable Suspicio |
| Pat Down/Frisk Conducted? 1 [Reason for Pat Down/Frisk (Cher 1 Verbal threats of violence by 3 Actions indicative of engagin 5 Suspicious bulge/object 7 Other reasonable suspicion of f a Pat Down/Frisk was conducted Gearch Beyond Pat Down/Frisk (| Yes 2 No Pat Down/Frisk k all that apply) suspect 2 Knowledge of susper g in violent behavior 4 Violent of 6 Evasive, false or inconsistent of weapon (Specify) , did it lead to a search beyond the pat of Search Beyon | Conducted by 1 Consent 2 Reas ect's prior criminal violent behavior/use of force crime suspected t response to officer's questions down/frisk? 1 Yes 2 No ond Conducted By | e/use of weapor |
| Pat Down/Frisk Conducted? 1 [Reason for Pat Down/Frisk (Cher 1 Verbal threats of violence by 3 Actions indicative of engagin 5 Suspicious bulge/object 7 Other reasonable suspicion of a Pat Down/Frisk was conducted Gearch Beyond Pat Down/Frisk (Cher 1 Yes 2 No Reason for Search Beyond (Cher 1 Drugs or drug paraphernalia | Yes 2 No Pat Down/Frisk ck all that apply) suspect 2 Knowledge of suspect g in violent behavior 4 Violent of 6 Evasive, false or inconsistent of weapon (Specify) | Conducted by 1 Consent 2 Reas ect's prior criminal violent behavior/use of force crime suspected t response to officer's questions down/frisk? 1 Yes 2 No and Conducted By 2 Probable Cause 3 Search Incide ing pat down 3 Firearm found du | e/use of weapon |
| Pat Down/Frisk Conducted? 1 [Reason for Pat Down/Frisk (Cher 1 Verbal threats of violence by 3 Actions indicative of engagin 5 Suspicious bulge/object 7 Other reasonable suspicion of a Pat Down/Frisk was conducted Search Beyond Pat Down/Frisk (Cher 1 Yes 2 No Reason for Search Beyond (Cher 1 Drugs or drug paraphernalia 4 Other weapon found during p f a Search Beyond a Pat Down/Fri f yes, what was found? | Yes 2 No Pat Down/Frisk ck all that apply) suspect 2 Knowledge of suspergin violent behavior 4 Violent of g in violent behavior 4 Violent of 6 Evasive, false or inconsistent of weapon (Specify) | Conducted by 1 Consent 2 Reas ect's prior criminal violent behavior/use of forcer crime suspected t response to officer's questions down/frisk? 1 Yes 2 No ond | e/use of weapor |
| at Down/Frisk Conducted? 1 teason for Pat Down/Frisk (Cheater of the second s | Yes 2 No Pat Down/Frisk ck all that apply) suspect 2 Knowledge of suspergin violent behavior 4 Violent of g in violent behavior 4 Violent of 6 Evasive, false or inconsistent of weapon (Specify) | Conducted by 1 Consent 2 Reas ect's prior criminal violent behavior/use of force crime suspected t response to officer's questions down/frisk? 1 Yes 2 No and Conducted By 2 Probable Cause 3 Search Incide ing pat down 3 Firearm found du use(Specify) nd? 1 Yes 2 No 5 Stolen Property 6 Other | e/use of weapor |

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. We explain how comparisons of each minority group to White pedestrians are carried out. We also explain 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 which proves an agency is practicing racial profiling. We provide some limitations for interpreting the findings based on the available data and methods.

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

We performed all calculations for the entire state of Illinois and for each agency.

B.2.1 Stop rates and rate ratios

We calculated stop rates 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.)

We assumed the number of stops followed 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.

We compared each minority group to White pedestrians using the ratio of the minority group stop rate to the White group stop rate. We calculated a 95% confidence interval 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.

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.

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 (one) are not bolded because the intent of this study is to identify potential racial profiling that discriminates against minority pedestrians.

For all calculations, we assumed 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

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

| Category | Outcome | Numerator | Denominator |
|-----------|---------------------------|---|------------------------------------|
| 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 |
| 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.

We assumed that percentages follow a binomial distribution and can be approximated by a Poisson distribution (Serfling 1978), and we calculated confidence intervals for the rates 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 we compared each minority group to White pedestrians using the ratio of the minority group percentage to the White group percentage. We calculated a 95% confidence interval for each ratio 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, we 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, we calculated five minority group comparisons with the White group. 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, we constructed five 95% confidence intervals—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, we may have, by chance, incorrectly indicated the potential need for inquiry for profiling. While we set a 5% type I error rate for each minority comparison, the multiple comparisons inflate the possibility of making such an error overall to more than 5%. We chose not to correct for these multiple comparisons, viewing each minority comparison to Whites as an independent examination of profiling.

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.

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 City 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, CA: RAND Corporation. 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.

Appendix C. Technical Notes on Benchmarks

C.1. Overview

In the analysis to detect 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 population and would be an expected racial distribution of the stops if the stops were conducted in a uniform way across races. That is, the stop rates calculated using an ideal benchmark would be approximately constant across all racial groups if there were no profiling.

Details on the data sources used for benchmarks, how racial categories were defined, how benchmark regions were determined, and other benchmark calculations are covered below. In addition, differences in benchmark methodology employed this year compared with prior years is described in **Section C.7** and limitations and strengths of the methodology are described in **Section C.8**.

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 (ACS), 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 by 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 1-year (1Y) ACS releases, there are also 5-year (5Y) releases. These 5Y releases combine 5 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 (PUMS). The PUMS data allows 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 release of ACS data.

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.

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

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

The U.S. Census Bureau approximates ZIP codes (defined by the U.S. Postal Service) with ZIP code tabulation areas (ZCTAs)⁵. 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 the traffic and pedestrian stop benchmarks. More detail on traffic stop benchmarks can be found in the corresponding Illinois traffic stops study report, 2021 stops, Part I. Of note, as can be seen from the table, different datasets were used for traffic and pedestrian benchmarks. The primary reason is that pedestrian benchmarks are based on city-, county-, or state-level population statistics, as described below, while the traffic stop benchmarks are based on ZIP-code-level population statistics.

| | Traffic Stop | Pedestrian Stop |
|---|-----------------------|-----------------------|
| Information Needed | Benchmarks | Benchmarks |
| Age distribution in Illinois | 1Y ACS PUMS 2021 | N/A |
| Age distribution by race/ethnicity* | 5Y ACS PUMS 2017-2021 | 5Y ACS PUMS 2017-2021 |
| Individual race groups to reallocate residents with more than one race* | 5Y ACS PUMS 2017-2021 | DEC 2020 |
| Population counts for each | | |
| race/ethnicity | | |
| By ZIP code† | 5Y ACS 2017-2021 | 5Y ACS 2017-2021‡ |
| By city | N/A | DEC 2020 |
| By county | N/A | DEC 2020 |
| For Illinois | N/A | DEC 2020 |
| Geographic area of each city in Illinois | Gazetteer Files 2022 | N/A |
| Geographic area of each county in Illinois | Gazetteer Files 2021§ | N/A |
| Latitude and longitude of each ZIP code | Gazetteer Files 2022 | N/A |

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

1Y = 1-year; 5Y = 5-year; ACS = American Community Survey; DEC = decennial census; 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; §2021 county area data was used before 2022 was not available online at the time Gazetteer files were downloaded (2/11/2023).

The 2020 decennial census was used for city-, county-, and state-level population statistics instead of the 5Y ACS because it a more complete count (a census vs. a survey sample) and more recent (the 5Y ACS includes years 2017-2021). However, the 5Y ACS PUMS was used to estimate the age distribution of each race/ethnicity group, as described in **Section C.4**, because this required individual-level data not yet available from the 2020 decennial census.

C.3. Racial Categories

The U.S. decennial census and ACS collect self-identified race and ethnicity information based on the U.S. Census Bureau's definitions. The primary racial categories provided by the census are White alone, Black or African American alone, American Indian and Alaska Native alone, Asian alone, Native Hawaiian

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

and Other Pacific Islander alone, some other race alone, and two or more races. The primary ethnicity categories provided by the census are "Hispanic or Latino" and "Not Hispanic or Latino." Race and ethnicity are collected using two separate questions and the respondent can select any racial group along with any ethnicity.

From Illinois Public Act 101-0024, the law enabling this study, the following racial categories are collected based on the police officer's subjective determination of the race of the person being stopped. These include American Indian and Alaska Native, Asian, Black or African American, Hispanic or Latino, Native Hawaiian or Other Pacific Islander, or White. Only a single race may be selected.

Besides the difference between the census/ACS's self-identified race and the Illinois law's officeridentified race, there are other differences the between the census/ACS and Illinois law's categories. The primary differences are 1) in the census/ACS, Hispanic or Latino is an ethnicity instead of the Illinois law's designation of Hispanic or Latino as a race; 2) the census/ACS allows for multiple races to be selected while the Illinois law does not; and 3) the census/ACS allows the "some other race" option while the Illinois law does not.

To make the different racial categories compatible between the census/ACS data used for benchmarks and the stops data using the Illinois racial categories, we made three major adjustments. The first adjustment was to use Hispanic or Latino as the assigned race for benchmarking if the census/ACS ethnicity was listed as Hispanic or Latino, regardless of race. The second adjustment involved reallocating the "multiple races" group into multiple single race groups using equal fractions fractional allocation⁶. For example, an individual who self-identified as White, American Indian or Alaska Native, and Asian would be treated as 1/3 White, 1/3 American Indian or Alaska Native, and 1/3 Asian for the purpose of calculating total race/ethnicity distributions. The 2020 decennial census race and ethnicity table for Illinois was used to calculate state-level reallocation factors, as shown in **Table C.2**. The third adjustment was that individuals listing some other race alone in the census/ACS data were excluded from the process of defining a benchmark population. In the 2020 decennial census, 414,855/12,812,508 (3.2%) of Illinois residents self-identified as not Hispanic or Latino and more than one race and were fractionally reallocated to multiple single race categories. Additionally, 45,080 (0.4%) identified as not Hispanic or Latino and some other race and were excluded from benchmark

calculations.

⁶ Parker JD and Makuc DM. Methodologic implications of allocating multiple-race data to single-race categories. *Health Services Research*. 2002;37(1):201-213.

Table C2. Equal fractions fractional reallocation factors for Illinois residents who self-identify as not Hispanic or Latino and more than one race, based on the 2020 decennial census. The factors were used to calculate the effective number of individuals with a single race category as a proportion of the multiple race category, e.g., single race count = (single race fraction) x multiple race count. The fractions sum to 1 (rounded from 0.999) so all multiple race individuals are included.

| Race/Ethnicity | Fraction |
|--|----------|
| Not Hispanic or Latino White | 0.547 |
| Not Hispanic or Latino Black | 0.178 |
| Not Hispanic or Latino American Indian or Alaska Native | 0.138 |
| Not Hispanic or Latino Asian | 0.126 |
| Not Hispanic or Latino Native Hawaiian or Other Pacific Islander | 0.010 |

C.4. Adjusting for Age

Population counts by race from the census/ACS were adjusted to reflect the number of potential pedestrians with at least some real risk of being stopped. This was done by estimating the proportion of the Illinois state population of each race who were 12-80 years of age using the 5Y ACS PUMS. **Table C.3** shows the estimated proportion of population included in the pedestrian benchmark counts. The age adjustment was performed by multiplying the population count for each race by the factor in the table. While those younger than age 12 or older than 80 are technically at risk of being stopped, the risk is expected to be very low, so they were excluded from the benchmark estimates. Illinois pedestrian stop records do not contain age information, so we examined data from the New York City "Stop, Question and Frisk" program⁷. Between 2016-2019, when the number of stops per year were relatively stable, stops of suspect-reported ages outside of the 12–80-year range represented <0.2% of stops performed. Note that the New York City data were used only to determine that age 12 is a reasonable minimum age to define a population of persons with non-trivial risk of being stopped. There is no implication that the stop rates are similar between Illinois and New York City.

| Table C.3. Estimated proportion of the population included in the pedestrian benchmark |
|--|
| based on ACS data. |

| Race | Proportion* |
|--|-------------|
| White | 0.84 |
| Black or African American | 0.82 |
| Hispanic or Latino | 0.79 |
| Asian | 0.85 |
| American Indian and Alaska Native | 0.86 |
| Native Hawaiian or Other Pacific Islander | 0.82 |
| *Proportion of population 12-80 years of a | ge. |

⁷ <u>https://www1.nyc.gov/site/nypd/stats/reports-analysis/stopfrisk.page.</u> Last accessed 5/15/22.

C.5. Estimating Regional Population Sizes

The starting point for estimating regional population sizes was the 2020 decennial census race and ethnicity tables for the cities, counties, and state of Illinois and the 5Y ACS race and ethnicity tables for ZIP codes, as described in **Section C.2**.

As described in **Section C.4**, these population sizes for the ZIP codes, cities, counties, and state of Illinois were adjusted for age by multiplying by a factor derived for each racial group. The adjusted population counts formed the building blocks for the agency benchmark calculations, described in the next section.

C.6. Calculating Agency Benchmarks

The regional population sizes calculated and adjusted in **Section C.5** were used and sometimes combined to derive a benchmark for each agency. There was a standard approach used for most agencies with a number of adjustments made for certain cases. Each situation is covered below. The geographic regions chosen for each agency are listed at the end of this appendix in **Table C.4**.

C.6.1. Standard Approach

The standard approach, similar to past years of the IPSS (Illinois Pedestrian Stop Study), was to use the city as representing an approximate radius for pedestrians⁸. Based on this approximation, the city population and its racial sub-populations served as the "default" benchmark populations for most agencies. As described later, this approach has a number of weaknesses, though the approach also has some practical advantages.

C.6.2. Agencies Covering Areas Larger than a City

When an agency had a jurisdiction spanning more than a small number of cities, most commonly an entire county or the state of Illinois, that county or state population was used for the benchmark population. Common examples of agencies where the county was used as the benchmark agencies are county sheriff agencies and county park district police agencies. An example of an agency where the state of Illinois was used as the benchmark is the Illinois State Police.

C.6.3. Agencies Covering Multiple Cities or Counties

When an agency's jurisdiction covered multiple cities or counties, the populations of these areas were combined. The most common examples of these are university or college police agencies with multiple campuses.

⁸ Illinois Traffic and Pedestrian Stop Study 2018 Annual Report. Pedestrian Stop Analysis. Available at <u>http://www.idot.illinois.gov/Assets/uploads/files/Transportation-System/Reports/Safety/Traffic-Stop-Studies/2018/2018%20IPSS%20Executive%20Summary.pdf</u>. Last accessed 5/15/22.

C.6.4. Chicago

Due to its size, multiple benchmarks were produced for Chicago. The entire city of Chicago was used as the primary benchmark of the Chicago Police. In addition, separate benchmarks were generated corresponding to each of the 22 Chicago Police Districts⁹. To generate these benchmarks, ZIP codes contained within or overlapping with each Chicago Police District's boundaries were identified¹⁰. The benchmark of each district was calculated as the sum of the pedestrian populations of these ZIP codes, weighted by the proportion of each ZIP code area contained within the district's boundary. Each proportion was estimated by randomly selecting 25,000 points within the ZIP code and calculating the proportion of those points that were also within the district boundary.

C.6.5. Example of Detailed Calculation

To help illustrate the benchmark method, the calculations for one agency, Oak Park Police, were worked out in detail for the White and Black/African American benchmarks.

Based on the 2020 decennial census, the city of Oak Park has a total of 54,583 residents, with 32,846 White residents, 10,200 Black/African American residents, and 3,187 residents with "more than one race." As described in **Section C.3**, the group with multiple races was reallocated to the other race groups by multiplying by the factors in **Table C.2**. Thus the 3,187 residents with multiple races were fractionally reallocated into 1,744.5 White residents (3,187 x 0.547390) and 567.3 Black/African American residents (3,187 x 0.178) (the values in the **Table C.2** are rounded, so they differ slightly from the values stated here). At this point, the total number of White and Black/African American residents became 34,590.5 (32,846 + 1,744.5) and 10,767.3 (10,200 + 567.3), respectively. Lastly, these population counts were adjusted for age using the factors in **Table C.3**. This produced 28,898 White residents (34,590.5 x 0.83543) and 8,828 Black/African American residents (10,767.3 x 0.819825), corresponding to pedestrians potentially at risk of being stopped. These are the final values used for the benchmark.

C.7. Methodological Differences with Past Reports for Stops in 2019-2020

While the methodology used for this report has some similarities with the 2019-2020 reports, including using adjusted population counts of associated cities and counties to define benchmark populations, there are some important differences. These should be considered when comparing stops from 2019-2020 to stops in this report. The methodology used in this report is the same as the report of 2021 stops. The 2019 and 2020 stops reports also describe differences with their methodologies compared with reports from 2016-2018.

One important difference is that in this report the 2020 decennial census was used for population counts while the 5Y ACS was used in 2019-2020 stops reports. Both of these data sources are collected and released by the U.S. Census Bureau and will usually provide similar results, but the 2020 census is

⁹ <u>https://home.chicagopolice.org/about/police-districts/</u>. Last accessed 5/15/22.

¹⁰ <u>https://data.cityofchicago.org/Public-Safety/Boundaries-Police-Districts-current-/fthy-xz3r</u>. Last accessed 5/21/22.

the most contemporary release at this time, so it is expected to be the most accurate for comparison with 2022 stops. Because the 5Y ACS is—effectively—an average of five years, the 2019 report population counts are closest to 2017 numbers (average of 2015-2019 ACS surveys), 3 years older than the 2020 census population counts used in this report. While the ACS surveys were the best available population data sources for our 2019-2020 stops reports, the 2020 census is the best available population data source for this report. There may be relatively large changes to benchmark population counts just due to this change in population data sources.

The other important difference is that, in this report and the 2021 stops report, individuals who reported multiple races on the census/ACS were reallocated into single race groups, while in past reports (2016-2020 stops), those with multiple races were excluded from benchmark calculations. In past years, the multiple race group was usually less than 2% of Illinois's population while in the 2020 census this group was larger, >3% of the population. Furthermore, while the absolute percentage is still relatively low, this group disproportionately includes residents who identify as American Indian/Alaska Native or Native Hawaiian/Other Pacific Islander as one of their races. After reallocating the multiple races as described in **Section C.3.**, the number of American Indian or Alaska Native residents of Illinois (based on the 2020 census) increased from 16,561 (0.1% of the population) to 73,933 (0.6% of the population) and the number of Native Hawaiian or Other Pacific Islander increased from 2,959 (0.02% of the population) to 7,053 (0.06% of the population). These groups are now better represented in the benchmarks than in past years (2016-2020 stops), which should lead to better estimates of their stop rates.

C.8. Limitations

The use of the census or ACS to compute benchmarks has a number of known limitations^{11,12}. The benchmarks are constructed to correspond to the racial distribution of a city or county, but people from outside the designated benchmark area travel through and may be stopped. This discrepancy may be particularly pronounced in areas with major freeways, along major commuting routes between large cities, or with popular attractions that draw people from a wide area. On the average, different groups may spend different amounts of time on the road or on the street, and the time of day of their activities may vary, potentially leading to different levels of exposure to being stopped than reflected by local population estimates. There may also be seasonal variation in the population, due to festivals, holidays, etc., which cannot be captured in static population estimates.

In order to address some of the limitations several alternative benchmarking methods have been proposed. One benchmark method is to carry out observational studies where people and their race are counted by sight at different times and places to estimate the population composition. Another benchmark method is to analyze traffic accident data (crashes) and use the race of the not-at-fault driver to estimate the relevant racial composition of drivers. Illinois crash report data was used for traffic stop benchmarks in the report on 2021 stops, but no similar dataset for characterizing

¹¹ Fridell, L. A. (2004). By the numbers: A guide for analyzing race data from vehicle stops. Washington, DC: Police Executive Research Forum. <u>https://www.ncjrs.gov/App/Publications/abstract.aspx?ID=209827</u>. Last accessed 5/25/21.

¹² Alpert G.P., Dunham R.G., Smith M.R. (2007). Investigating Racial Profiling by the Miami-Dade Police Department: A Multimethod Approach. *Criminology & Public Policy*;6(1):25-56. https://www.ncjrs.gov/App/Publications/abstract.aspx?ID=239772. Last accessed 5/25/21.

pedestrians was available. Yet another method is to mathematically model traffic flows between different cities and regions to merge their racial distributions to better reflect the racial distribution encountered by law enforcement officers.

Despite these limitations, the benchmarking method we have used has a number of strengths, primarily feasibility and transparency. There are close to 1,000 law enforcement agencies in Illinois, many with small jurisdictions. The census or ACS provides relatively contemporary data in a uniform fashion across the state, while alternative methods would require a tremendous volume of resources to acquire specialized data to construct a customized benchmark for each agency. The method used for this report is also transparent in that the concept of using local population data is easy to understand, and all of our adjustments are relatively straightforward and can be itemized. The ACS is conducted annually, so the underlying data for all agencies are able to remain relatively current and reflect demographic composition.

Besides the general limitations of the methodology described above, there are some other important limitations to consider when interpreting the benchmarks and stop rate ratios. Most importantly, the benchmarks are based on census or ACS tabulations of race, which are provided by the respondent. Illinois stop data used race as recorded by the police officer, which may differ from what the individual being stopped would report. Therefore, some differences between the racial distribution of the stop data and the corresponding benchmark racial distribution may be due to racial misclassification.

Another challenge is that the census and ACS collect race in a different way than defined by the Illinois state law for the stops study, so some adjustments had to be made for compatibility, as described in Section **C.3**, above. This approach may have induced some differences in racial distributions between the stops (with race assigned by the officer) and corresponding benchmarks (based on self-assigned race). Lastly, the ACS data is based on a survey that takes a random sample of the population. There is some error in survey estimates due simply to sampling variability. In particular, this can impact estimates of population counts of smaller groups. For example, the number of American Indian or Alaska Native and Native Hawaiian or Other Pacific Islanders were relatively small in a number of regions, so these counts may be more uncertain for some jurisdictions. Improvements in counting those groups were made starting with the 2021 stops report, but the equal-fractions fractional allocation method that was used for handling "multiple races" is only a pragmatic approximation that could still differ from both self-identified and officer-identified primary race. Thus, while the study has strengths, there are some limitations as well. That is why the narrative in this report emphasizes that if a stop rate ratio comparing a racial group to Whites differs substantially from 1.0 (that is, differs from racial equality), that may be the basis for further inquiry but does not prove that there is racial profiling.

Table C.4. Geographic region or regions used in the Pedestrian Study for each agency that made stops and completely or partially reported them. All regions are either one or more cities (or Chicago Police Districts), one or more counties, or the state. As described in Section C.6.4, Chicago was divided into the 22 Chicago Police Districts based on ZIP codes. As described in the text, the populations of these regions were adjusted in multiple ways to better match the pedestrian population.

| Agency | ID | Primary Benchmark Area |
|---|----------|--|
| Adams County Sheriff | 13054 | County: Adams |
| Algonquin Police | 13566 | City: Algonquin |
| Altamont Police | 13288 | City: Altamont |
| Alton Police | 13626 | City: Alton |
| Anna Police | 13883 | City: Anna |
| Antioch Police | 13463 | City: Antioch |
| Arlington Heights Police | 13212 | City: Arlington Heights |
| Arthur Police | 13242 | City: Arthur |
| Barrington Police | 13465 | City: Barrington |
| Bartlett Police | 13211 | City: Bartlett |
| Batavia Police | 13414 | City: Batavia |
| Bedford Park Police | 13210 | City: Bedford Park |
| Belleville Police | 13795 | City: Belleville |
| Bellwood Police | 13209 | City: Bellwood |
| Bensenville Police | 13247 | City: Bensenville |
| Berwyn Police | 13207 | City: Berwyn |
| Bethalto Police | 13625 | City: Bethalto |
| Bloomington Police | 13581 | City: Bloomington |
| Blue Mound Police | 13590 | City: Blue Mound |
| Bradley University Police | 13711 | City: Peoria |
| Bridgeport Police | 13522 | City: Bridgeport |
| Buffalo Grove Police | 13467 | City: Buffalo Grove |
| Burbank Police | 13200 | City: Burbank |
| Burr Ridge Police | 13249 | City: Burr Ridge |
| Calhoun County Sheriff | 13086 | County: Calhoun |
| Campton Hills Police | 14114 | City: Campton Hills |
| Carbondale Police | 13387 | City: Carbondale |
| Carlinville Police | 13601 | City: Carlinville |
| Carol Stream Police | 13250 | City: Carol Stream |
| Cary Police | 13564 | City: Cary |
| Caseyville Police | 13792 | City: Caseyville |
| Centralia Police | 13633 | City: Centralia |
| Champaign Police | 13111 | City: Champaign |
| Channahon Police | 13953 | City: Channahon |
| Charleston Police | 13143 | City: Charleston |
| Chicago Metra Police | 13195 | County: Cook, Lake, McHenry, Kane, DuPage, Kendall, Will |
| Chicago Police | 13194 | City: Chicago |
| Chicago Police (1st District - Central) | 13194.01 | City: Chicago 1st District (Central) |
| Chicago Police (2nd District - Wentworth) | 13194.02 | City: Chicago 2nd District (Wentworth) |
| Chicago Police (3rd District - Grand | 13194.03 | City: Chicago 3rd District (Grand Crossing) |
| Crossing) | | |
| Chicago Police (4th District - South | 13194.04 | City: Chicago 4th District (South Chicago) |
| Chicago) | | |
| Chicago Police (5th District - Calumet) | 13194.05 | City: Chicago 5th District (Calumet) |
| Chicago Police (6th District - Gresham) | 13194.06 | City: Chicago 6th District (Gresham) |
| Chicago Police (7th District - Englewood) | 13194.07 | City: Chicago 7th District (Englewood) |

| Agency | ID | Primary Benchmark Area |
|--|----------|--|
| Chicago Police (8th District - Chicago | 13194.08 | City: Chicago 8th District (Chicago Lawn) |
| Lawn) | | |
| Chicago Police (9th District - Deering) | 13194.09 | City: Chicago 9th District (Deering) |
| Chicago Police (10th District - Ogden) | 13194.10 | City: Chicago 10th District (Ogden) |
| Chicago Police (11th District - Harrison) | 13194.11 | City: Chicago 11th District (Harrison) |
| Chicago Police (12th District - Near West) | 13194.12 | City: Chicago 12th District (Near West) |
| Chicago Police (14th District - | 13194.14 | City: Chicago 14th District (Shakespeare) |
| Shakespeare) | | |
| Chicago Police (15th District - Austin) | 13194.15 | City: Chicago 15th District (Austin) |
| Chicago Police (16th District - Jefferson | 13194.16 | City: Chicago 16th District (Jefferson Park) |
| Park) | | |
| Chicago Police (17th District - Albany Park) | 13194.17 | City: Chicago 17th District (Albany Park) |
| Chicago Police (18th District - Near North) | 13194.18 | City: Chicago 18th District (Near North) |
| Chicago Police (19th District - Town Hall) | 13194.19 | City: Chicago 19th District (Town Hall) |
| Chicago Police (20th District - Lincoln) | 13194.20 | City: Chicago 20th District (Lincoln) |
| Chicago Police (22nd District - Morgan | 13194.22 | City: Chicago 22nd District (Morgan Park) |
| Park) | | |
| Chicago Police (24th District - Rogers Park) | 13194.24 | City: Chicago 24th District (Rogers Park) |
| Chicago Police (25th District - Grand | 13194.25 | City: Chicago 25th District (Grand Central) |
| Central) | | |
| Chillicothe Police | 13710 | City: Chillicothe |
| Cicero Police | 13191 | City: Cicero |
| Clarendon Hills Police | 13251 | City: Clarendon Hills |
| Collinsville Police | 13624 | City: Collinsville |
| Cook County Forest Preserve Police | 13189 | County: Cook |
| Country Club Hills Police | 13187 | City: Country Club Hills |
| Crest Hill Police | 13952 | City: Crest Hill |
| Crete Police | 14000 | City: Crete |
| Crystal Lake Police | 13563 | City: Crystal Lake |
| CSX Transportation Railroad Police | 14147 | City: East St. Louis |
| Danville Police | 13897 | City: Danville |
| Darien Police | 13253 | City: Darien |
| Deerfield Police | 13469 | City: Deerfield |
| DeKalb Police | 13233 | City: DeKalb |
| Des Plaines Police | 13184 | City: Des Plaines |
| Dixon Police | 13526 | City: Dixon |
| Downers Grove Police | 13254 | City: Downers Grove |
| DuPage County Forest Preserve Police | 14043 | County: DuPage |
| East Alton Police | 13623 | City: East Alton |
| East Dundee Police | 13416 | City: East Dundee |
| East Moline Police | 13764 | City: East Moline |
| Eastern Illinois University Police | 13141 | City: Charleston |
| Elburn Police | 13417 | City: Elburn |
| Elgin Police | 13419 | City: Elgin |
| Elk Grove Village Police | 13180 | City: Elk Grove Village |
| Elmhurst Police | 13256 | City: Elmhurst |
| Elmwood Park Police | 13179 | City: Elmwood Park |
| Elmwood Police | 13709 | City: Elmwood |
| Energy Police | 13965 | City: Energy |
| Evanston Police | 13178 | City: Evanston |
| Fairfield Police | 13913 | City: Fairfield |
| Fairmont City Police | 13786 | City: Fairmont City |
| Fairview Heights Police | 13785 | City: Fairview Heights |
| Farmer City Police | 13235 | City: Farmer City |
| Flossmoor Police | 13176 | City: Flossmoor |
| | • | |

| Agency | ID | Primary Benchmark Area |
|--|-------|--|
| Fondulac Park District Police | 14017 | City: East Peoria |
| Forest Park Police | 13174 | City: Forest Park |
| Fox Lake Police | 13470 | City: Fox Lake |
| Frankfort Police | 13949 | City: Frankfort |
| Freeport Police | 13852 | City: Freeport |
| Fulton County Sheriff | 13316 | County: Fulton |
| Geneva Police | 13421 | City: Geneva |
| Gillespie Police | 13599 | City: Gillespie |
| Glen Ellyn Police | 13258 | City: Glen Ellyn |
| Glencoe Dept. of Public Safety | 13171 | City: Glencoe |
| Glendale Heights Police | 13259 | City: Glendale Heights |
| Glenview Police | 13170 | City: Glenview |
| Granite City Police | 13620 | City: Granite City |
| Grantfork Police | 14045 | City: Grantfork |
| Grayslake Police | 13471 | City: Grayslake, Hainesville |
| Greenville Police | 13065 | City: Greenville |
| Gurnee Police | 13473 | City: Gurnee |
| Hanover Park Police | 13473 | City: Hanover Park |
| Hanover Park Police Harrisburg Police | 13168 | City: Hanover Park |
| | - | |
| Harwood Heights Police | 13165 | City: Harwood Heights |
| Henry County Sheriff | 13360 | County: Henry |
| Herrin Police | 13963 | City: Herrin |
| Hickory Hills Police | 13163 | City: Hickory Hills |
| Highland Park Police | 13474 | City: Highland Park |
| Hinsdale Police | 13260 | City: Hinsdale |
| Hoffman Estates Police | 13048 | City: Hoffman Estates |
| Huntley Police | 13558 | City: Huntley |
| Illinois Department of Natural Resources | 13823 | State: Illinois |
| Police | | |
| Illinois State Police | 13991 | State: Illinois |
| Illinois State University Police | 13573 | City: Normal |
| Jackson County Sheriff | 13383 | County: Jackson |
| Jo Daviess County Sheriff | 13402 | County: Jo Daviess |
| Johnsburg Police | 13557 | City: Johnsburg |
| Joliet Police | 13945 | City: Joliet |
| Kane County Forest Preserve Police | 13424 | County: Kane |
| Kankakee Police | 13440 | City: Kankakee |
| Kansas Police | 13279 | City: Kansas |
| Kendall County Sheriff | 13453 | County: Kendall |
| La Grange Police | 14013 | City: La Grange |
| Lake Bluff Police | 13478 | City: Lake Bluff |
| Lake County Forest Preserve Police | 13479 | County: Lake |
| Lake Forest Police | 13481 | City: Lake Forest |
| Lake in the Hills Police | 13556 | City: Lake in the Hills |
| Lake Villa Police | 13482 | City: Lake Villa |
| Lansing Police | 13041 | City: Lansing |
| Lemont Police | 13944 | City: Lemont |
| LeRoy Police | 13572 | City: LeRoy |
| Lexington Police | 13571 | City: Lexington |
| Lincolnwood Police | 13040 | City: Lincolnwood |
| Loyola University Police | 13039 | City: Chicago 24th District (Rogers Park), Chicago 18th District |
| | | (Near North) |
| Madison County Sheriff | 13615 | County: Madison |
| Madison Police | 13614 | City: Madison |
| Mahomet Police | 13106 | City: Mahomet |

| Agency | ID | Primary Benchmark Area |
|--------------------------------------|----------------|--|
| Marengo Police | 13554 | City: Marengo |
| Marissa Police | 13780 | City: Marissa |
| Mattoon Police | 13139 | City: Mattoon |
| McHenry County College Police | 14127 | City: Crystal Lake |
| McHenry County Conservation District | 14004 | County: McHenry |
| Police | | |
| McHenry County Sheriff | 13553 | County: McHenry |
| McHenry Police | 13552 | City: McHenry |
| McLeansboro Police | 13340 | City: McLeansboro |
| Melrose Park Police | 13033 | City: Melrose Park |
| Midlothian Police | 13030 | City: Midlothian |
| Milan Police | 13761 | City: Milan |
| Millikin University Police | 14142 | City: Decatur |
| Millstadt Police | 13778 | City: Millstadt |
| Mokena Police | 13941 | City: Mokena |
| Moline Police | 13759 | City: Moline |
| Momence Police | 13438 | City: Momence |
| Monee Police | 13940 | City: Monee |
| Morton Grove Police | 13027 | City: Morton Grove |
| Morton Police | 13867 | City: Morton |
| Mount Prospect Police | 13026 | City: Mount Prospect |
| Mount Vernon Police | 13392 | City: Mount Vernon |
| Mundelein Police | 13488 | City: Mundelein |
| Murphysboro Police | 13382 | City: Murphysboro |
| New Lenox Police | 13939 | City: New Lenox |
| Normal Police | 13568 | City: Normal |
| Norridge Police | 13024 | City: Norridge |
| Northbrook Police | 13022 | City: Northbrook |
| Northfield Police | 13020 | City: Northfield |
| Northlake Police | 13019 | City: Northlake |
| Northwestern University Police | 13018 | City: Evanston, Chicago 18th District (Near North) |
| O'Fallon Police | 13776 | City: O'Fallon |
| Oak Brook Police | 13265 | City: Oak Brook |
| Oak Lawn Police | 13015 | City: Oak Lawn |
| Oak Park Police | 13014 | City: Oak Park |
| Okawville Police | 13907 | City: Okawville |
| Olney Police | 13754 13011 | City: Olney City: Orland Park |
| Orland Park Police | | |
| Oswego Police Palatine Police | 13451 13010 | City: Oswego City: Palatine |
| Park Forest Police | 13010 | City: Park Forest |
| Parkland College Police | 13105 | City: Champaign |
| Pekin Police | 13105 | City: Pekin |
| Peoria Heights Police | 13706 | City: Peoria Heights |
| Peoria Park District Police | 13705 | City: Peoria |
| Peoria Police | 13703 | City: Peoria |
| Plainfield Police | 13937 | City: Plainfield |
| Pontiac Police | 13529 | City: Pontiac |
| Pontoon Beach Police | 14054 | City: Pontoon Beach |
| Prophetstown Police | 13924 | City: Prophetstown |
| Prospect Heights Police | 13002 | City: Prospect Heights |
| Quincy Police | 13058 | City: Quincy |
| Rantoul Police | 13104 | City: Rantoul |
| Richton Park Police | 13001 | City: Richton Park |
| River Forest Police | 13000 | City: River Forest |
| | | |

| Agency | ID | Primary Benchmark Area |
|--|----------------|---|
| River Grove Police | 12999 | City: River Grove |
| Riverside Police | 12997 | City: Riverside |
| Rochester Police | 13811 | City: Rochester |
| Rock Falls Police | 13923 | City: Rock Falls |
| Rock Island County Sheriff | 13757 | County: Rock Island |
| Rock Island Police | 13756 | City: Rock Island |
| Rockford Police | 13975 | City: Rockford |
| Rockton Police | 13974 | City: Rockton |
| Romeoville Police | 13935 | City: Romeoville |
| Roodhouse Police | 13331 | City: Roodhouse |
| Roscoe Police | 13973 | City: Roscoe |
| Rosemont Police | 12994 | City: Rosemont |
| Round Lake Beach Police | 13492 | City: Round Lake Beach |
| Round Lake Police | 13495 | City: Round Lake |
| Roxana Police | 13611 | City: Roxana |
| Rushville Police | 13833 | City: Rushville |
| Salem Police | 13628 | City: Salem |
| Saline County Sheriff | 13028 | County: Saline |
| Sandwich Police | 13797 | City: Sandwich |
| Schaumburg Police | 12992 | City: Schaumburg |
| Schaumburg Police | 12992 | City: Schiller Park |
| | 13809 | State: Illinois |
| Secretary of State Police | - | |
| Shiloh Police Skokie Police | 13775 | City: Shiloh |
| | 12990 | City: Skokie |
| South Jacksonville Police | 13685 | City: South Jacksonville |
| South Roxanna Police | 13610 | City: South Roxana |
| South Suburban College Police | 12987 | City: South Holland, Oak Forest |
| Southern Illinois University Carbondale | 13381 | City: Carbondale |
| Police | 12000 | City Felverdeville |
| Southern Illinois University Edwardsville | 13609 | City: Edwardsville |
| Police | 13773 | City Pollovillo Cropito City |
| Southwestern Illinois College Police Sparta Police | 13742 | City: Belleville, Granite City |
| | | City: Sparta |
| Spring Valley Police | 13075 | City: Spring Valley |
| Springfield Police Stark County Sheriff | 13805 13846 | City: Springfield |
| | | County: Stark |
| Stephenson County Sheriff | 13848 | County: Stephenson |
| Sterling Police | 13922 | City: Sterling |
| Stone Park Police | 13159 | City: Stone Park |
| Swansea Police | 13771 | City: Swansea |
| Troy Police | 13607 | City: Troy |
| University of Chicago Police | 14057 | City: Chicago 2nd District (Wentworth) |
| University of Illinois Chicago Police | 13152 | City: Chicago 12th District (Near West) |
| University of Illinois Urbana-Champaign | 13101 | City: Champaign, Urbana |
| Police | 12100 | City Urbana |
| Urbana Police | 13100 | City: Urbana |
| Villa Park Police | 13268 | City: Villa Park |
| Warrenville Police | 13269 | City: Warrenville |
| Washington Police | 13860 | City: Washington |
| West City Police | 13303 | City: West City |
| West Dundee Police | 13433 | City: West Dundee |
| West Frankfort Police | 13302 | City: West Frankfort |
| Western Illinois University Police | 13540 | City: Macomb |
| Westville Police | 13884 | City: Westville |
| Wheaton Police | 13273 | City: Wheaton |

| Agency | ID | Primary Benchmark Area |
|---------------------------|-------|------------------------|
| Wheeling Police | 13148 | City: Wheeling |
| Will County Sheriff | 13931 | County: Will |
| Williamson County Sheriff | 13957 | County: Williamson |
| Willow Springs Police | 13147 | City: Willow Springs |
| Wilmette Police | 13146 | City: Wilmette |
| Winfield Police | 13275 | City: Winfield |
| Winnebago Police | 13971 | City: Winnebago |
| Winnetka Police | 13145 | City: Winnetka |
| Winthrop Harbor Police | 13500 | City: Winthrop Harbor |
| Wood Dale Police | 13276 | City: Wood Dale |
| Wood River Police | 13605 | City: Wood River |
| Woodstock Police | 13546 | City: Woodstock |
| Worden Police | 14067 | City: Worden |
| Zion Police | 13501 | City: Zion |

Appendix D. Additional Notes on Illinois Law Concerning the Stops 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 stops¹³) 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 items 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 stops 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. The Illinois Department of Transportation 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.

¹³ The pedestrian stop data collection form in use during 2022 has provision for recording an arrest. The traffic stop data collection form in use during 2022 does not provide a means of recording an arrest.