# Interpreting Disparity Data Dr. Lorie Fridell San Leandro Community Police Review Board April 16, 2025

## Introduction

"Disparity Data": Any police activity data that is analyzed by race/ethnicity or other demographics.

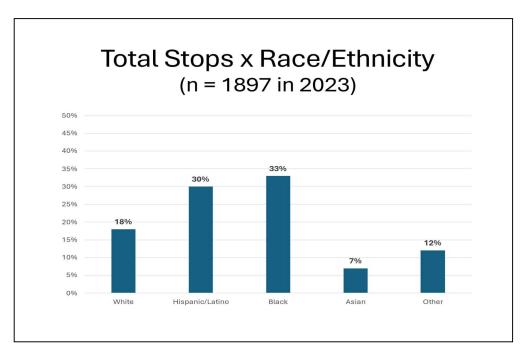
San Leandro: The vehicle and pedestrian stop data collected pursuant to the California Racial & Identity Profiling Act of 2015 (RIPA) and reported by IntegrAssure in the 2023 – 2024 Annual Report posted at: <u>https://www.sanleandro-ipa.com/reports-and-related-documents</u>

## Part 1: Challenges of Interpreting Disparity Data

<u>Resource</u>: By the Numbers: A Guide for Analyzing Race Data from Vehicle Stops (Fridell, 2004). Available at <u>www.policeforum.org</u>. Find "Publications," "PERF Reports," scroll down to 2004. The "cliff notes" version, *Understanding Race Data from Vehicle Stops: A Stakeholders Guide*, is found under 2005.

### A. Differences versus Disparities

Figure 1a. The Percent of Total Stops x Race/Ethnicity shows Differences (data from p. 66 of report)



We see "differences," but without more, this does not tell us much about "disparities."

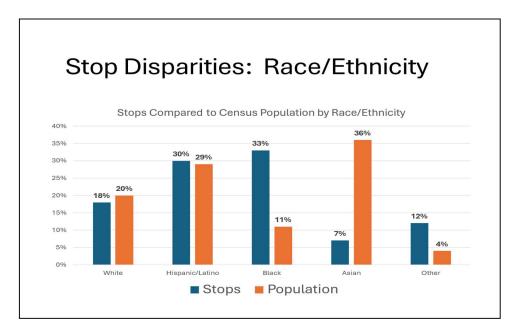


Figure 1b. Benchmarking Stop Data Against Census Data Shows Disparities

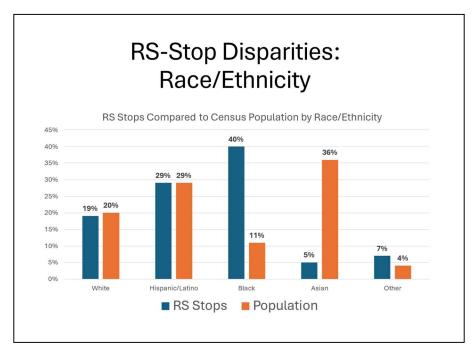
We see, for instance, that *Blacks are over represented among people who are stopped relative to their representation in the San Leandro population*. (Asians are underrepresented.) But, drawing conclusions about bias from the figure above assumes, at least, that:

- Everyone with whom SLPD officers interact are San Leandro residents
- Everyone in the city is at equal risk of being stopped (regardless of, for instance, behavior)

Both of these are false.

### B. Thinking About Causes/Sources of Disparity Using Gender as an Example

Figure 2a. Benchmarking Reasonable-Suspicion Stops Against Census Data Shows Racial Disparities



We see that Blacks individuals were stopped disproportionate to their representation in the population. (The opposite is true for Asians.) That disparity could be produced by legitimate factors (e.g., differential behavior), illegitimate factors (i.e., bias), or both.

Figure 2b. Benchmarking Reasonable-Suspicion Stops Against Census Data Shows Gender Disparities

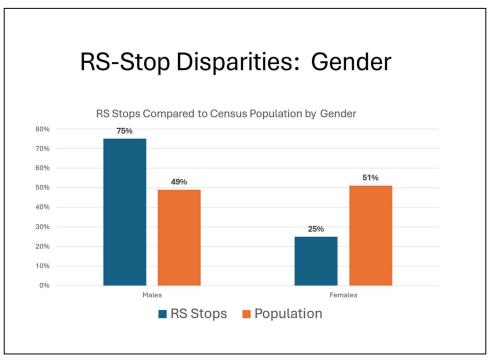
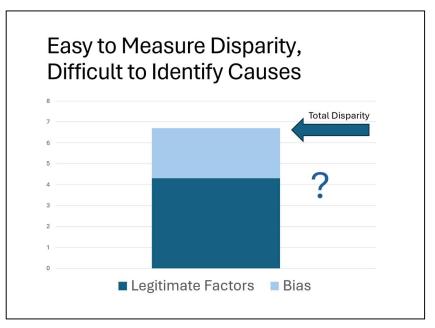


Figure 2b helps us see that disparities might be produced by legitimate factors. Few would look at the differences between men and women and immediately assume it was due to police bias.

<u>Theme</u>: It is easy to measure disparity, it is difficult to identify and measure the causes or sources of that disparity.

Figure 3. Visual Conceptualization of the Theme



There are some legitimate and illegitimate factors that might contribute to demographic disparities in stops.

Pedestrian Stops, for instance:

- ✓ Biased police decisions
- ✓ Differences in criminality
- ✓ Geographic differences (linked to police deployment)

Vehicle Stops, for instance:

- ✓ Biased police decisions
- $\checkmark$  Differences in the quantity, quality and location of driving
- $\checkmark$  SES as linked to equipment violations and driving location

#### C. Veil of Darkness

Veil of Darkness (VOD) Method: Compare stops during daylight to stops during darkness, which allows you to compare the stops in which officers (presumably) *can* discern race/ethnicity (daylight) to stops in which officers *cannot* (darkness).

Assumption: Stops in which officers cannot discern demographics (darkness) are inherently free of bias.

Why before/after sunset?

- ✓ People on the road during the daytime versus nighttime can be very different
- Focusing on right before/after sunset: Assumes that the nature of the driving population does not change significantly, but the visibility of driver demographics does.

### Veil of Darkness Results per IntegrAssure for 2022 and 2023 (pp. 168 – 169)

2022	Black	Hispanic	White	Other	Total
Daylight	76 (38%) *	62 (31%) *	37 (18%)	27 (13%)	202 (100%
Darkness	122 (37%)	112 (34%)	50 (15%) *	48 (14%)	332 (100%)

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\*Higher (%) values in these cells could be considered evidence of bias

2023	Black	Hispanic	White	Other	Total
Daylight	44 (34%) *	41 (31%) *	20 (15%)	26 (20%)	131 (100%)
Darkness	59 (33%)	56 (32%)	33 (19%) *	29 (16%)	177 (100%)

Above, we see no significant differences between the stops of Black and Hispanic individuals during daylight versus darkness.

VOD is a viable method of analysis but applies only to one police decision (to stop someone) and can only be applied to vehicle (not pedestrian) stops.

## Part 2: It's not All About the Data!

<u>Resource</u>: Fridell (2017). *Producing Bias-Free: A Science-Based Approach*. Springer Publishers.

Disparity-data collection is just *one tool* in the toolbox for police leaders and other stakeholders who are committed to producing impartial policing. Agencies need to implement a "comprehensive strategy to produce impartial policing," the elements of which are:

- ✓ Recruitment/hiring
- ✓ Bias-free policing policy
- ✓ Training
- ✓ Leadership & supervision
- ✓ Accountability
- ✓ Measurement
- ✓ Operations
- ✓ Outreach

#### Summary

- ✓ It's easy to measure disparity, it is difficult to parse out the sources/causes of that disparity.
- ✓ Don't make the efforts/discussions in San Leandro all about the data. Give attention to actual measures to produce impartial policing.

**Dr. Fridell** is a retired professor of Criminology from the University of South Florida in Tampa. She is a social scientist who has conducted research on law enforcement for 40 years. She has written books, articles and chapters on a number of topics including police use of force, community policing and biased policing. One of the books on biased policing is *By the Numbers: A Guide for Analyzing Race Data from Vehicle Stops*. This book has served as a critical resource for police agencies and social scientists analyzing disparity data. Dr. Fridell wrote *Producing Bias-Free Policing: A Science-Based Perspective* (Springer 2017) and is the founder of "Fair and Impartial Policing," which is the #1 provider of implicit bias training for law enforcement in the nation (www.fipolicing.com).