

# Research and Issues Regarding Body Worn Cameras

**Assessing the Evidence and the Impact and Consequences of Police Officer Body-Worn  
Cameras**

*Michael D. White, Arizona State University (ASU)*

**Evaluating the Impact of Officer Worn Body Cameras in the Phoenix Police Department**

*Charles Katz, ASU; Michael Kurtenbach, Phoenix Police Department; David Choate, ASU; and Justin Ready, ASU*

**Experimentation on Body Worn Cameras: Challenges of Design and Implementation**

*William Sousa, University of Nevada, Las Vegas*

November 19, 2014 – 8:00-9:20 a.m.

American Society of Criminology Meeting, San Francisco, CA



# **Assessing the Evidence on the Impact and Consequences of Police Officer Body-Worn Cameras**

**Michael D. White, Ph.D.**

**American Society of Criminology Meetings  
San Francisco, November 2014**



**ARIZONA STATE UNIVERSITY**

*School of Criminology and Criminal Justice & Center for Violence Prevention and Community Safety*

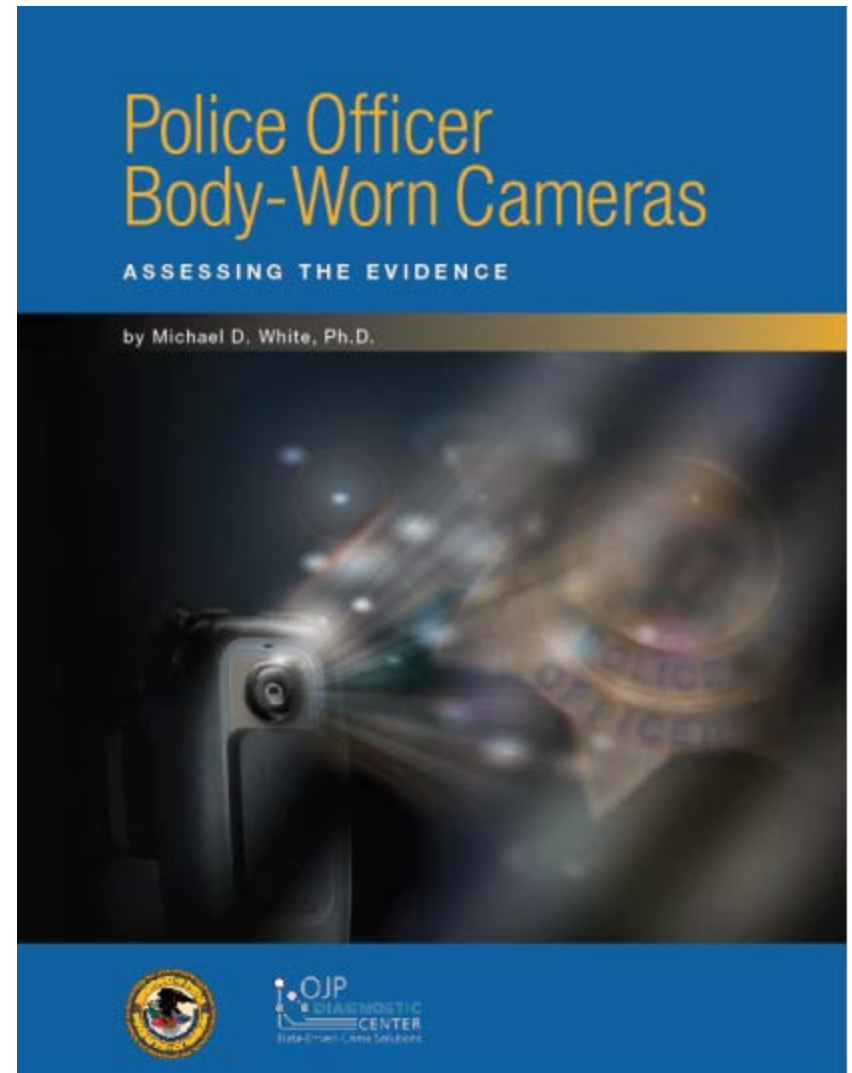
# OJP Diagnostic Center Review (White 2014)

## Origins of the Report

- Prepared for a Diagnostic Center engagement

## Purpose of the Report

- Review the available research (the “puzzle” analogy)
  - Identify all relevant issues and claims (pro and con)
  - Provide a framework for evaluating the technology (the “edge pieces”)
  - Assess the current state of evidence on each claim
  - Make recommendations for next steps



# The Available Research on Police Officer Body-Worn Cameras

## Empirical Studies of Officer Body-Worn Cameras, as of May 2014

Country	Study	Citation	Independent Evaluation	Comparative Design
England	Plymouth Head Camera Project	Goodall 2007	Yes; Process Evolution Limited	No
Scotland	Renfrewshire/Aberdeen Studies	ODS Consulting 2011	Yes; ODS Consulting	No
United States	Rialto (CA) Police Department	Farrar 2013	No	Yes
United States	Mesa (AZ) Police Department	MPD 2013	No*	Yes
United States	Phoenix (AZ) Police Department	Katz 2014	Yes; Arizona State University	Yes

\*Arizona State University has conducted survey research of Mesa police officers, and collected field contact reports for 400 police-citizen encounters. The outcome evaluation is directed by the Mesa Police Department, however.

# Perceived Benefits and the Evidence

Benefits
Increased Transparency and Legitimacy (?)
Improved Police Officer Behavior (~)
Improved Citizen Behavior (~)
Expedited Resolution of Complaints and Lawsuits (~)
Improved Evidence for Arrest and Prosecution (~)
Opportunities for Police Training (?)

(?) no evidence currently available to support this claim

(~) some evidence to support this claim, more research needed

(+) strong evidence available to support this claim

# Perceived Concerns and the Evidence

Concerns
Citizens' Privacy (~)
Officers' Privacy (~)
Officers' Health and Safety (?)
Training and Policy Requirements (+)
Logistical/Resource Requirements, including data storage and retrieval (+)

(?) no evidence currently available to support this claim

(~) some evidence to support this claim, more research needed

(+) strong evidence available to support this claim

# Recommendations for Next Steps

- **Agencies should proceed cautiously – most claims not sufficiently tested**
  - Be clear about goals, desired outcomes
- **Rigorous, independent research is needed**
  - Research/practitioner collaborations
- **Policy guidance from leadership organizations is needed**
- **Build a comprehensive working group of stakeholders at the beginning of the adoption process**
- **Technology holds great promise as a training/learning tool**
  - Academy
  - Violence Reduction
  - Sentinel Events

# Thanks!

## Michael D. White, Ph.D.

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*School of Criminology and Criminal Justice*







# Evaluating the Impact of Officer Worn Body Cameras in the Phoenix Police Department

Commander Mike Kurtenbach, Phoenix Police Department

Charles M. Katz, Ph.D., Arizona State University

David Choate, M.A. & Justin Ready, Ph.D.; Arizona State University

November 19, 2014

This project was supported by Grant No. 2011-DB-BX-0018 awarded by the Bureau of Justice Assistance. The Bureau of Justice Assistance is a component of the Office of Justice Programs, which also includes the Bureau of Justice Statistics, the National Institute of Justice, the Office of Juvenile Justice and Delinquency Prevention, the Office for Victims of Crime, and the SMART Office. Points of view or opinions in this document are those of the author and do not necessarily represent the official position or policies of the U.S. Department of Justice.

# Targeted Problems

- Violence in general has declined in Phoenix but domestic violence has remained problematic
  - 40,000 incidents of domestic violence are dispatched a year
  - Domestic violence is one of the top five call types
- Shift in relationship with residents
  - Police community relations complex in some communities
  - High profile events involving police-resident encounters in these same communities

# City Manager Task Force

- Created in April 2010 to address residents' concerns about Police Department interactions with the community
- Developed 34 recommendations designed to increase community access to, communication with, and confidence in the Police Department
- One recommendation called for a pilot program involving the deployment of dash cameras

# The Technology

- Selected Viewu
  - Self-contained device worn on his/her torso
    - Size of a pager
  - Docking station
  - Uploaded to PPD servers

# Project Goals

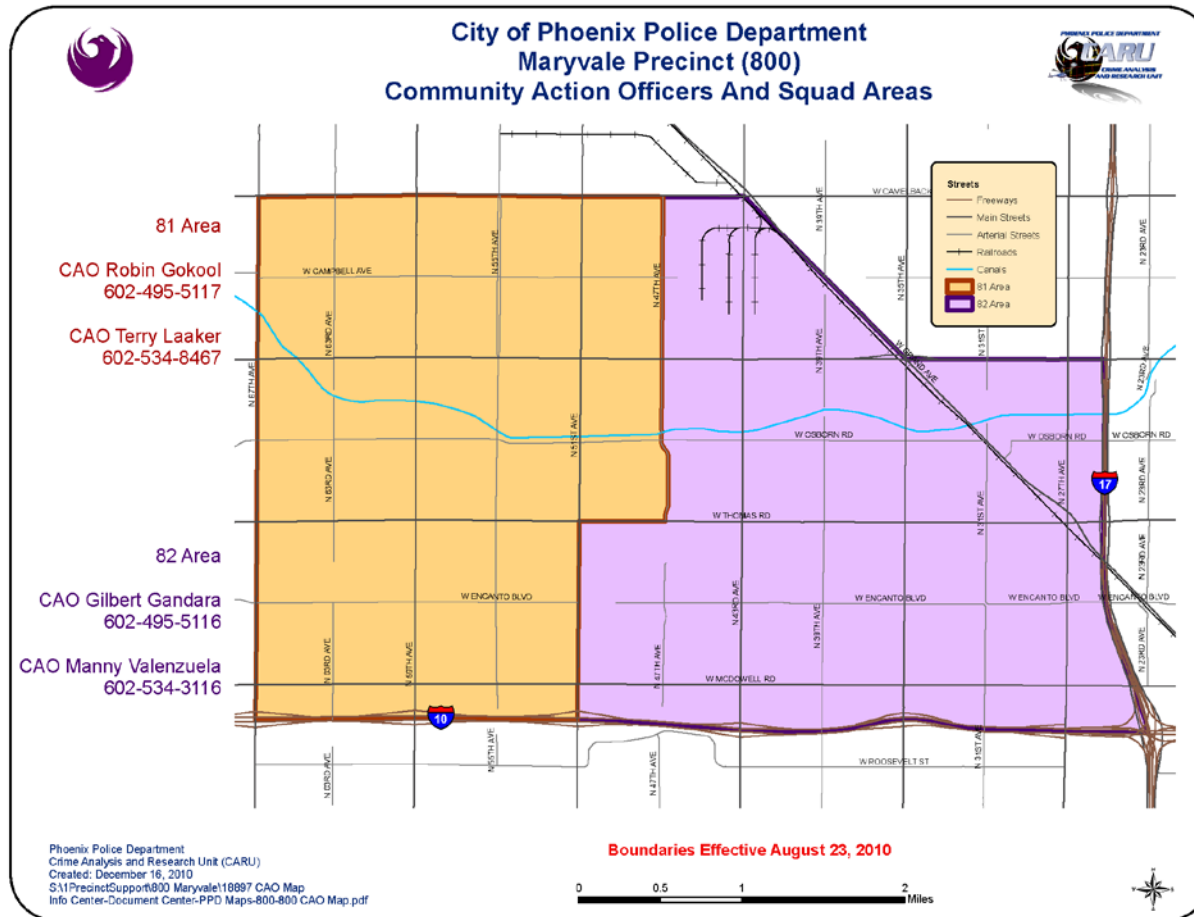
## **Increase police & public accountability**

- Record police and citizen interaction
- Deter unprofessional conduct
- Disprove allegations
- Reduce resisting arrest and officer assault incidents
- Increase perceptions of legitimacy, trust and satisfaction with the police
- Decrease complaints
- Reduce civil judgments

## **Increase the effectiveness of police response to domestic violence**

- Improve officer recollection for reports and court
- Can be used as evidence
- Improve charging
- Increased prosecution
- Increased conviction rates

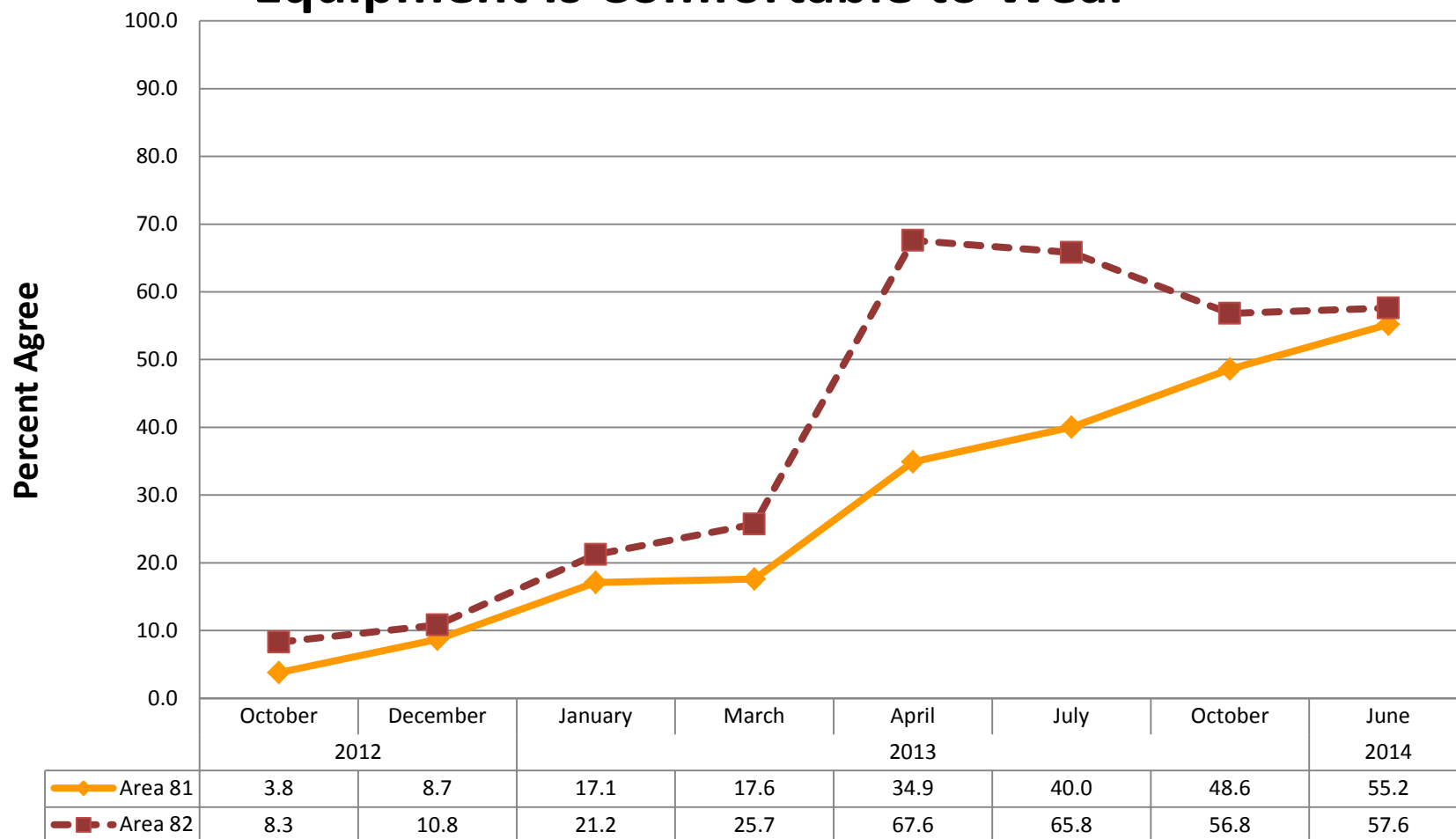
# Maryvale Precinct



# Quasi-experimental Design

- Repeated measures from the below sources
  - Police/court data
  - Administrative records
  - Officer self-report surveys
  - Meta-data from cameras
  - Interviews with officers

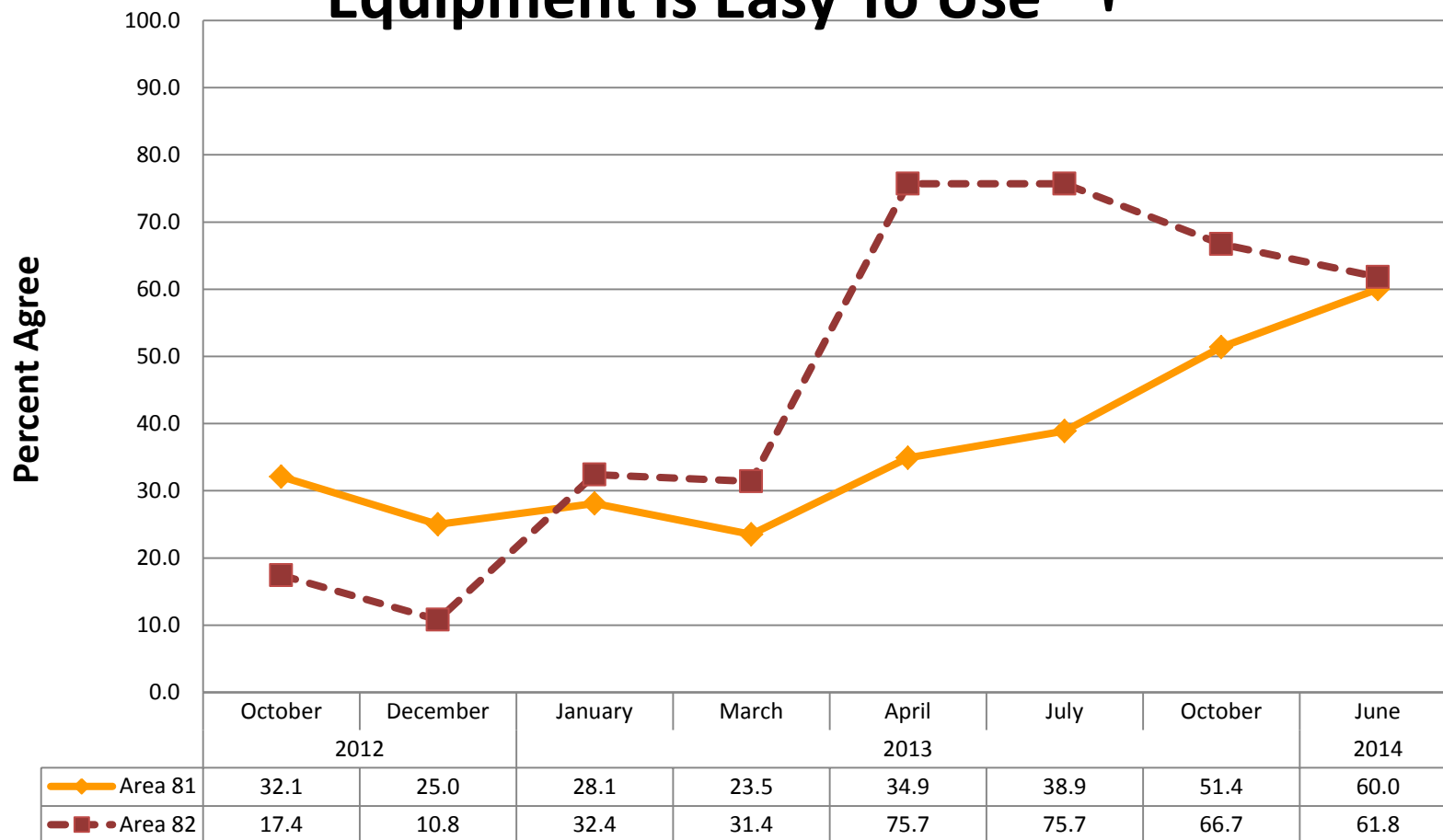
# Familiarity, Comfort, & Ease of Use: Equipment Is Comfortable to Wear \*†



\* \* Area 81-82  $p \leq .05$  ; † Pre-Post  $p \leq .05$

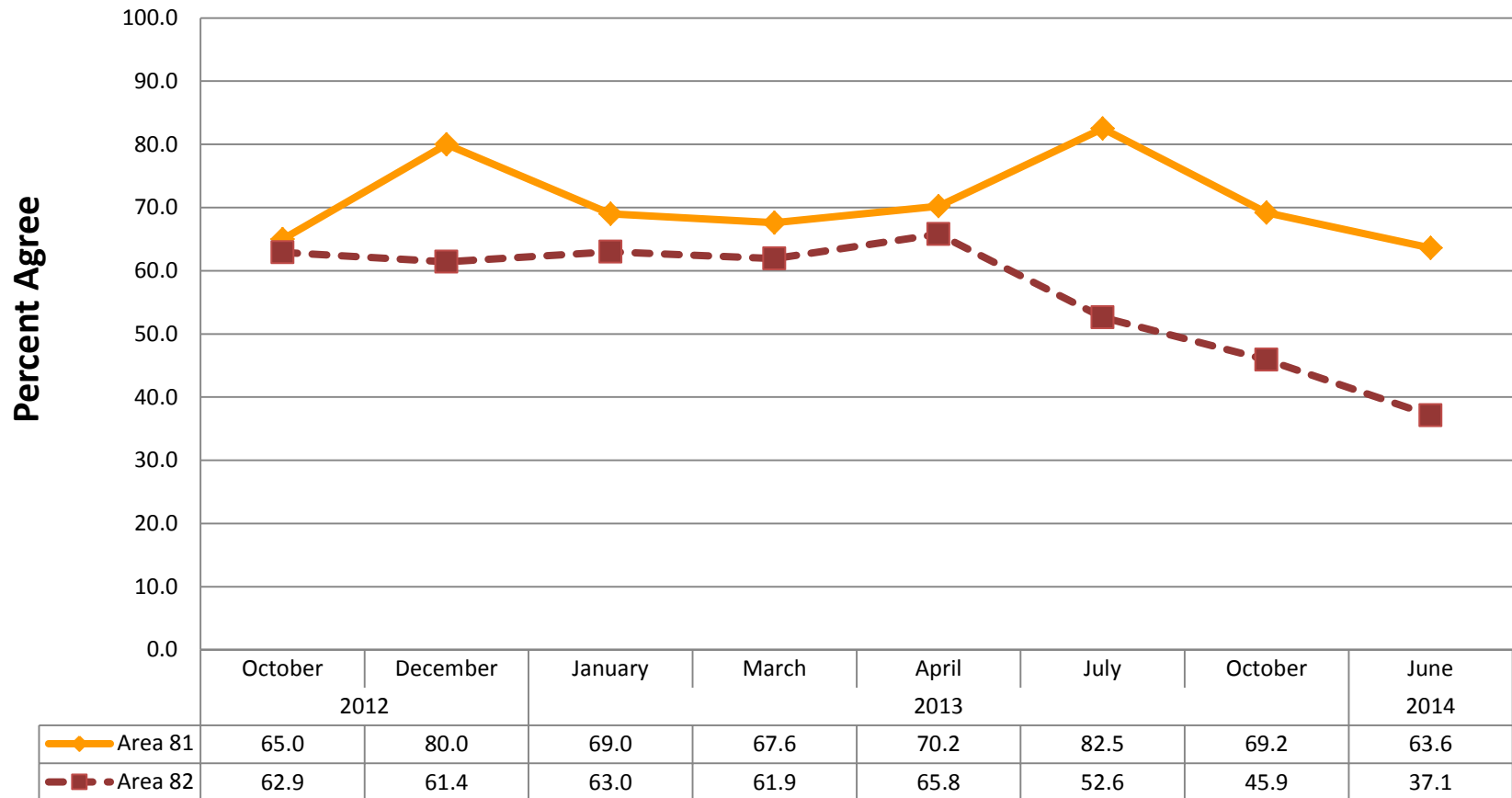


## Familiarity, Comfort, & Ease of Use: Equipment Is Easy To Use \*†



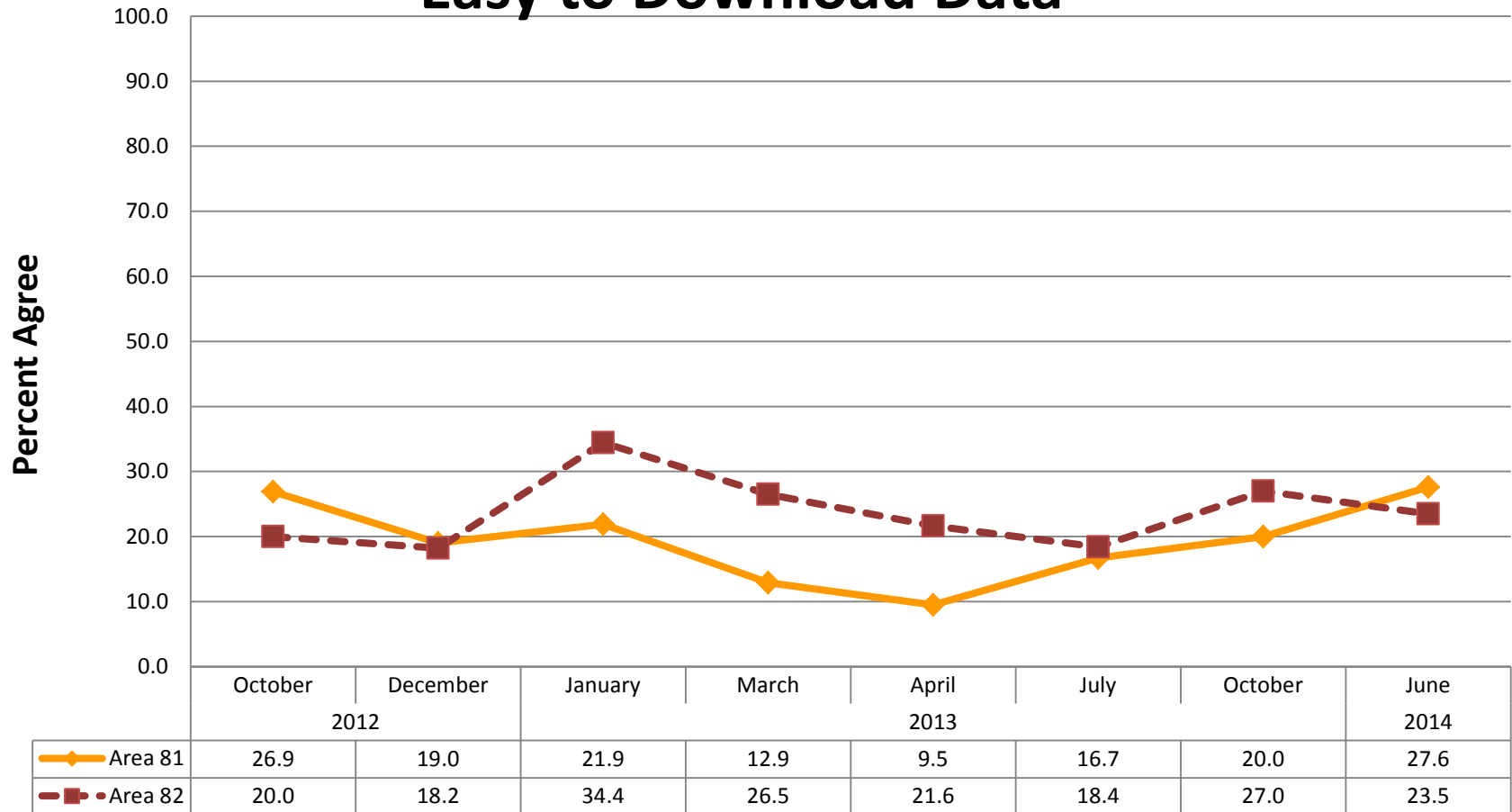
\*\* Area 81-82  $p \leq .05$  ; † Pre-Post  $p \leq .05$

# Police Officer Behavior: Will Have Fewer Contacts With Citizens \*



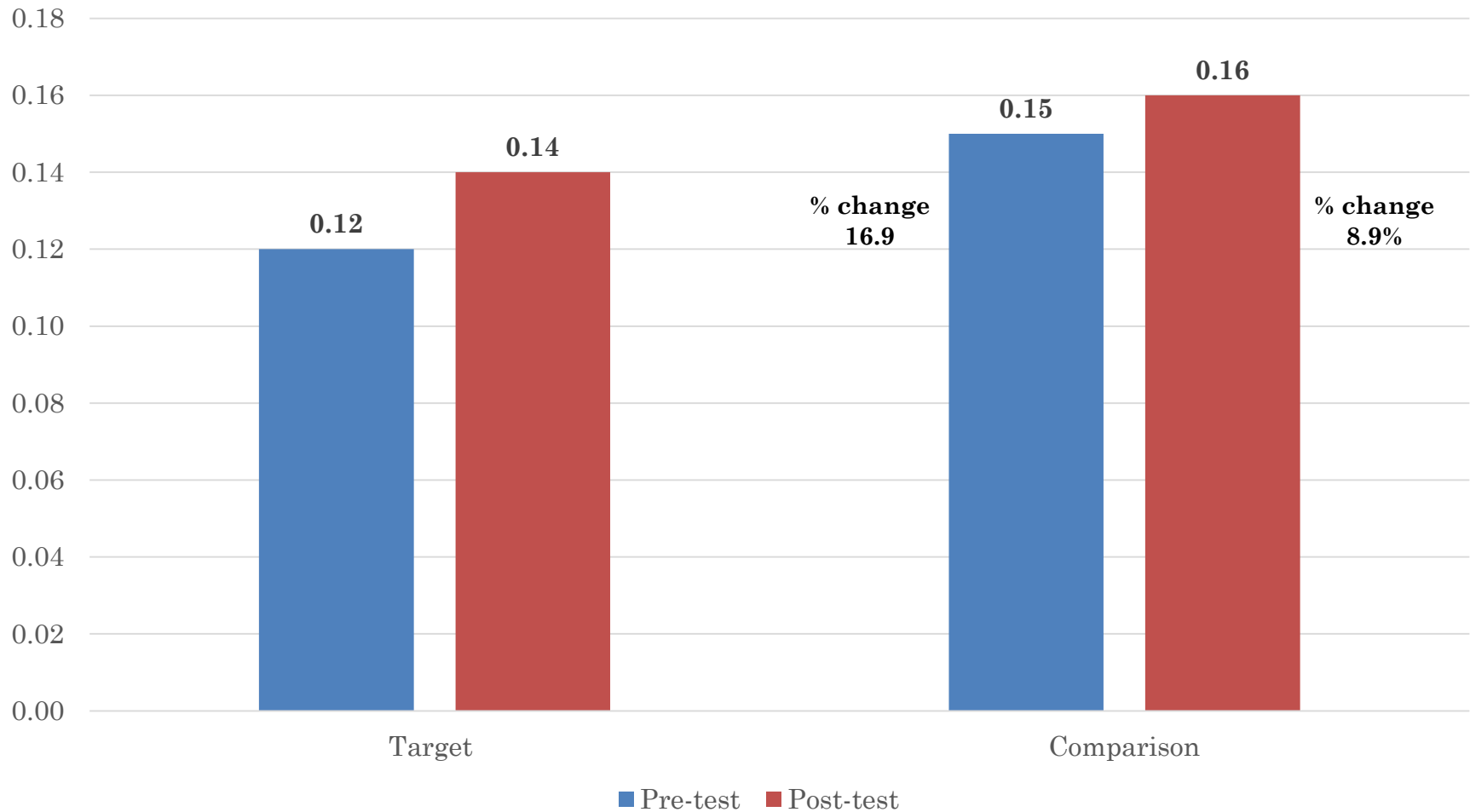
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# Familiarity, Comfort, & Ease of Use: Easy to Download Data

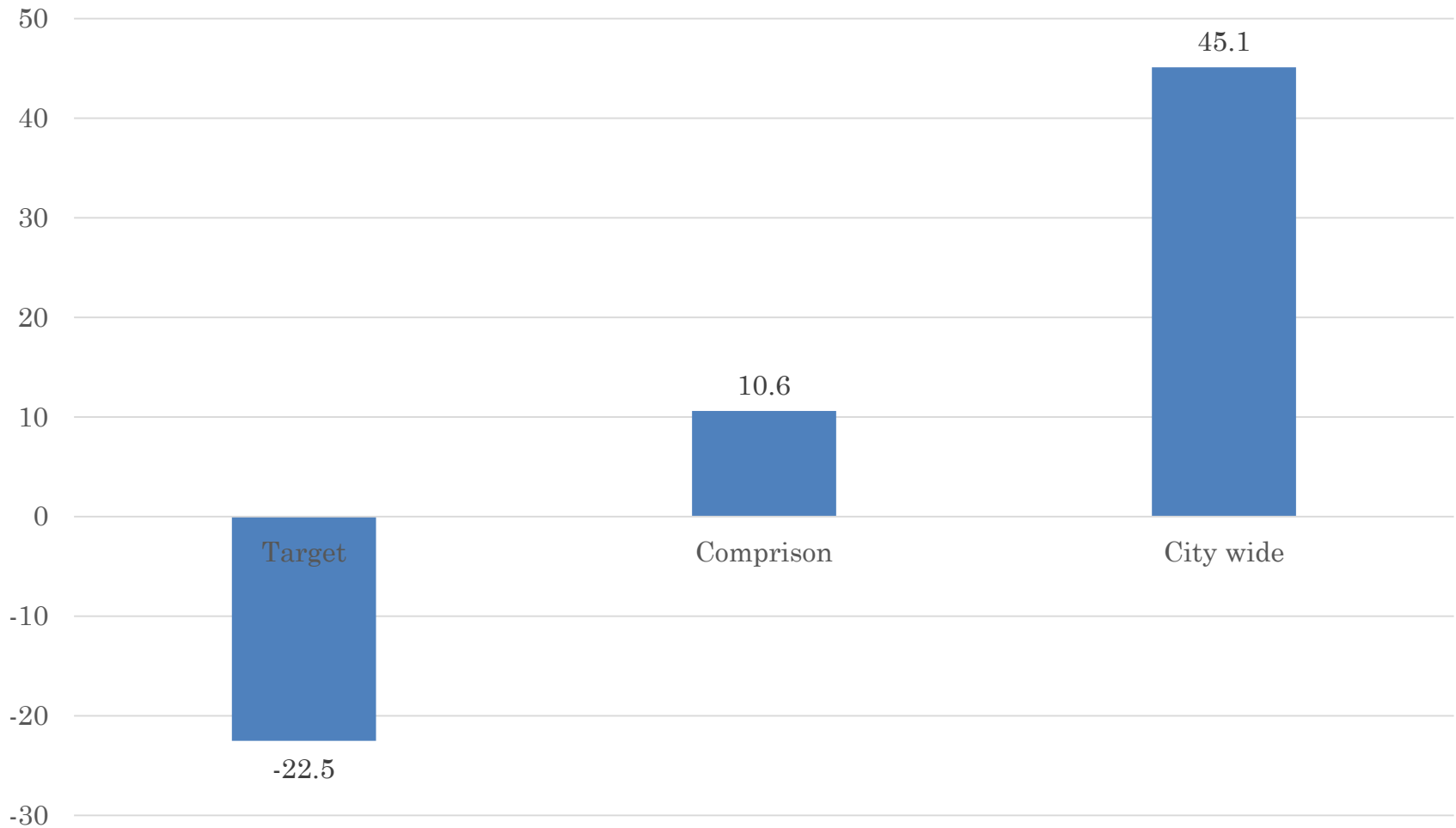


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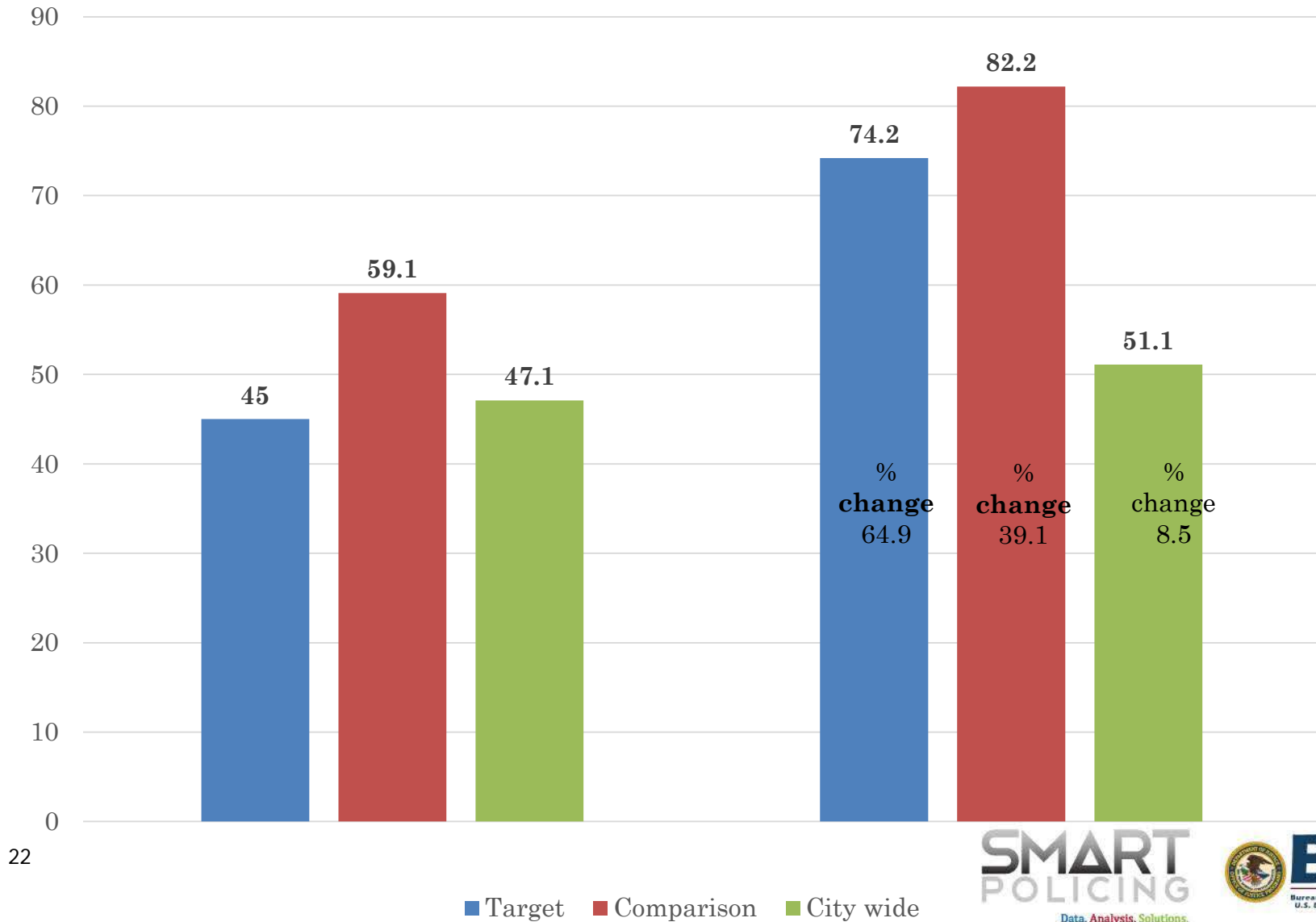
# Productivity: Mean Number of Arrests



# Percent Change in Complaints Before and After BWC



# Percentage of Complaints that are Unfounded



# Evaluating the impact of officer worn body cameras in the Phoenix Police Department

Thanks, any questions?



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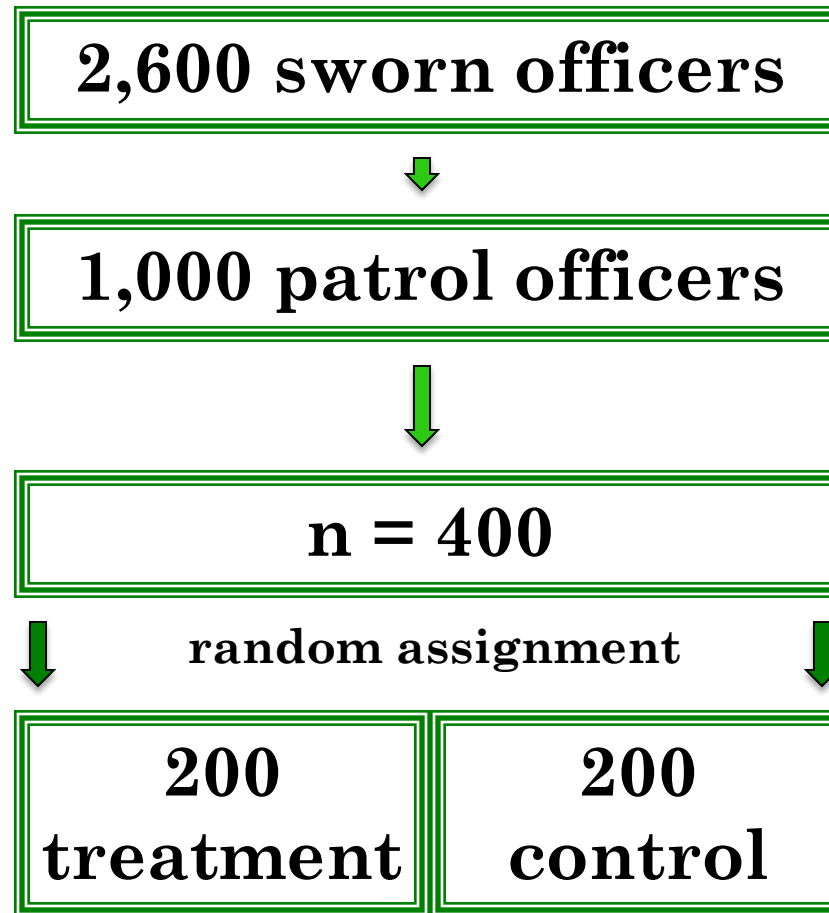
# Experimentation on Body Worn Cameras

## Challenges of Design and Implementation

William H. Sousa  
19 November 2014



# RCT of Body Cameras in LVMPD



# Implementation Challenges

## **TECHNICAL**



Infrastructure limitations related to data storage reduce the subject pool

## **POLITICAL**



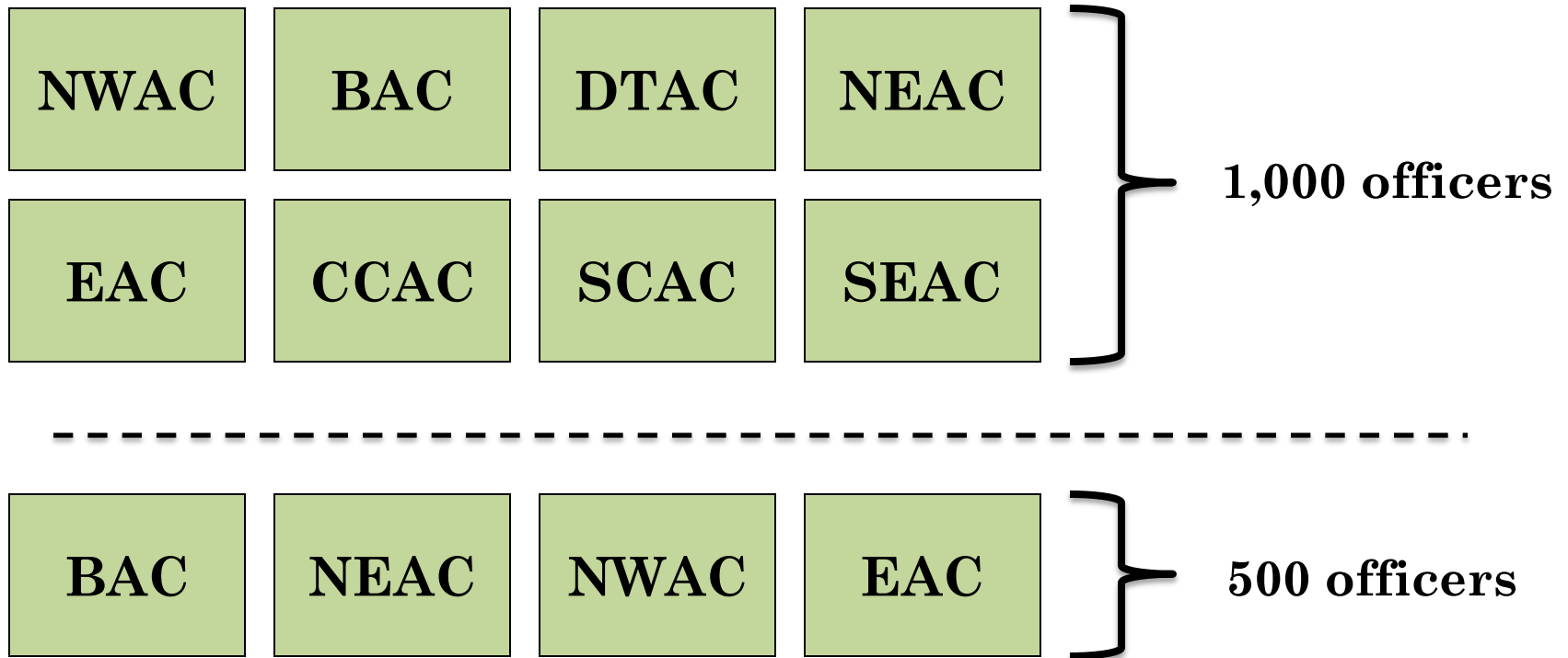
Officer concerns limit the number of subjects willing to participate

## **ADMINISTRATIVE**



Choice of division selected to implement BWCs impacts recruitment

# Technical/Infrastructure Challenges



# Political Challenges

**LVMPD elects to make BWCs voluntary for current officers in response to union concerns**

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“I’m not against it... I just want to see how the policy works for a while.”

“I’m not against it... I just don’t want to be committed to it for a year.”

“I’m not against it, but I have never had a problem with complaints against me. The camera is just something extra I would need to worry about.”

“I don’t trust the administration with this.”

# Administrative Challenges

**Choice of administrative division to implement body worn cameras?**

**Administrative &  
Sciences Division**

**Patrol  
Division**

**Technology &  
Support Division**

**Professional  
Standards Division**

# First Round of Recruitment

**Technical  
Challenges**

**Political  
Challenges**

**Administrative  
Challenges**

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**Target # of Subjects**

**400**

**Subjects Recruited**

**82**

# Change of Tactics

## **Technical Challenges**

- Technological innovations allow for limited recruitment from non-infrastructure area commands

## **Political Challenges**

- Policy changes address officer concerns
- “Success” stories aid in recruitment
- External events

## **Administrative Challenges**

- Reorganization under Patrol Division

# Second Round of Recruitment

**Technical  
Challenges**

**Political  
Challenges**

**Administrative  
Challenges**

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**Target # of Subjects**

**400**

**Subjects Recruited**

**389**



# The Sample: Opinion of Technology

	<b>Comfort with Technology in General</b>		<b>Comfort with Policing Technology</b>	
	N	%	N	%
<i>Number of Officers</i>	389	100%	389	100%
<i>Comfort Level</i>				
High	156	40.1%	146	37.5%
Medium	204	52.4%	208	53.5%
Low	29	7.5%	35	9.0%

# RCT Participants and Non-Participants

	<b>Study Participants</b>		<b>Non-Participants</b>	
	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>
<i>Number of Officers</i>	<b>379</b>	<b>100%</b>	<b>992</b>	<b>100%</b>
<i>Gender</i>				
Male	<b>348</b>	<b>91.8%</b>	<b>894</b>	<b>90.1%</b>
Female	<b>31</b>	<b>8.2%</b>	<b>98</b>	<b>9.9%</b>
<i>Race / Ethnicity</i>				
White	<b>271</b>	<b>71.5%</b>	<b>708</b>	<b>71.4%</b>
Hispanic	<b>53</b>	<b>14.0%</b>	<b>146</b>	<b>14.7%</b>
Black	<b>33</b>	<b>8.7%</b>	<b>63</b>	<b>6.4%</b>
Asian / Other	<b>22</b>	<b>5.8%</b>	<b>75</b>	<b>7.6%</b>
<i>Age in Years</i>				
Mean	<b>36.9</b>		<b>35.8</b>	
Median	<b>36</b>		<b>34</b>	
<i>Rank</i>				
Patrol Officer 1	<b>36</b>	<b>9.5%</b>	<b>115</b>	<b>11.6%</b>
Patrol Officer 2	<b>285</b>	<b>75.2%</b>	<b>808</b>	<b>81.5%</b>
Sergeant	<b>58</b>	<b>15.3%</b>	<b>69</b>	<b>7.0%</b>

# Control and Treatment Participants

	<b>Control Group</b>		<b>Treatment Group</b>	
	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>
<i>Number of Officers</i>	188	100%	191	100%
<i>Gender</i>				
Male	172	91.5%	176	92.1%
Female	16	8.5%	15	7.9%
<i>Race / Ethnicity</i>				
White	131	69.7%	140	73.3%
Hispanic	29	15.4%	24	12.6%
Black	18	9.6%	15	7.9%
Asian / Other	10	5.3%	12	6.3%
<i>Age in Years</i>				
Mean	37.7		36.3	
Median	37.5		34	
<i>Rank</i>				
Patrol Officer 1	18	9.6%	18	9.4%
Patrol Officer 2	138	73.4%	147	77.0%
Sergeant	32	17.0%	26	13.6%

# Discussion

## **RCT Challenges**

- As with all RCT involving large police agencies, researchers encounter political and organizational obstacles
- BWCs also present challenges related to technical infrastructure

## **Next Steps**

- Compare participants / non-participants and treatment / control officers on major outcomes (i.e., misconduct complaints, use of force, etc.)