

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,
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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

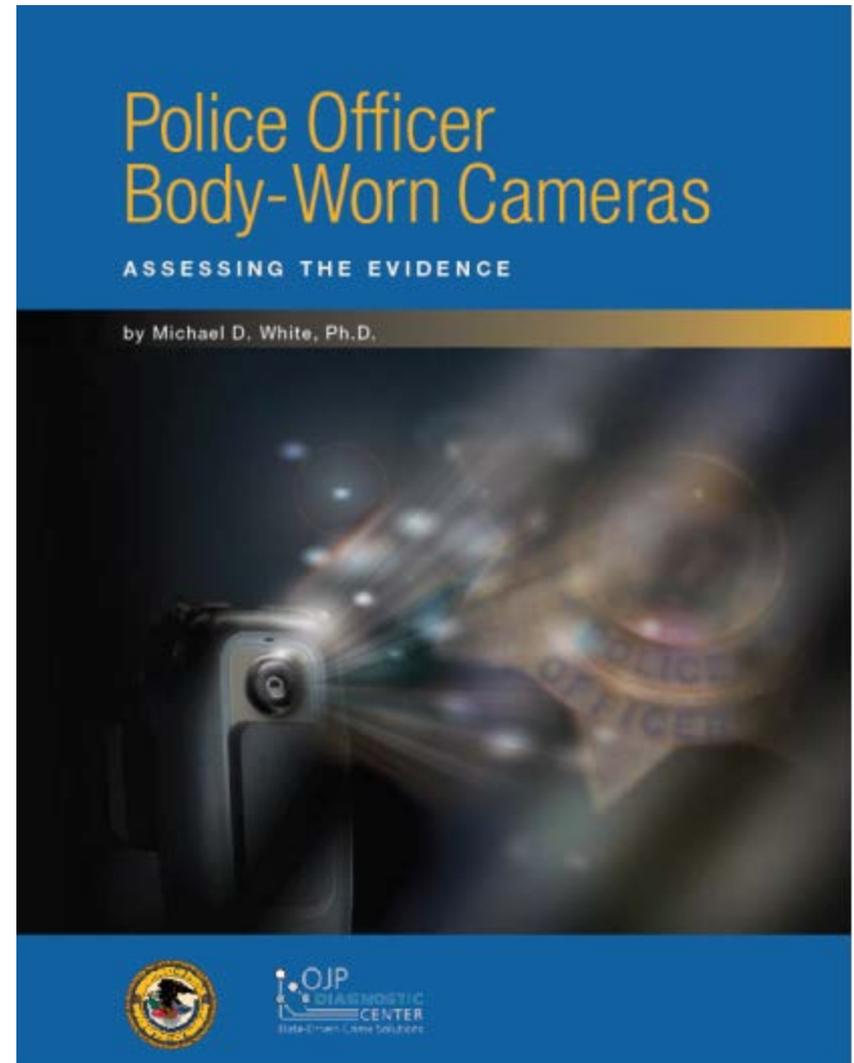
OJP Diagnostic Center Review (White 2014)

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

Commander Mike Kurtenbach, Phoenix Police Department

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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

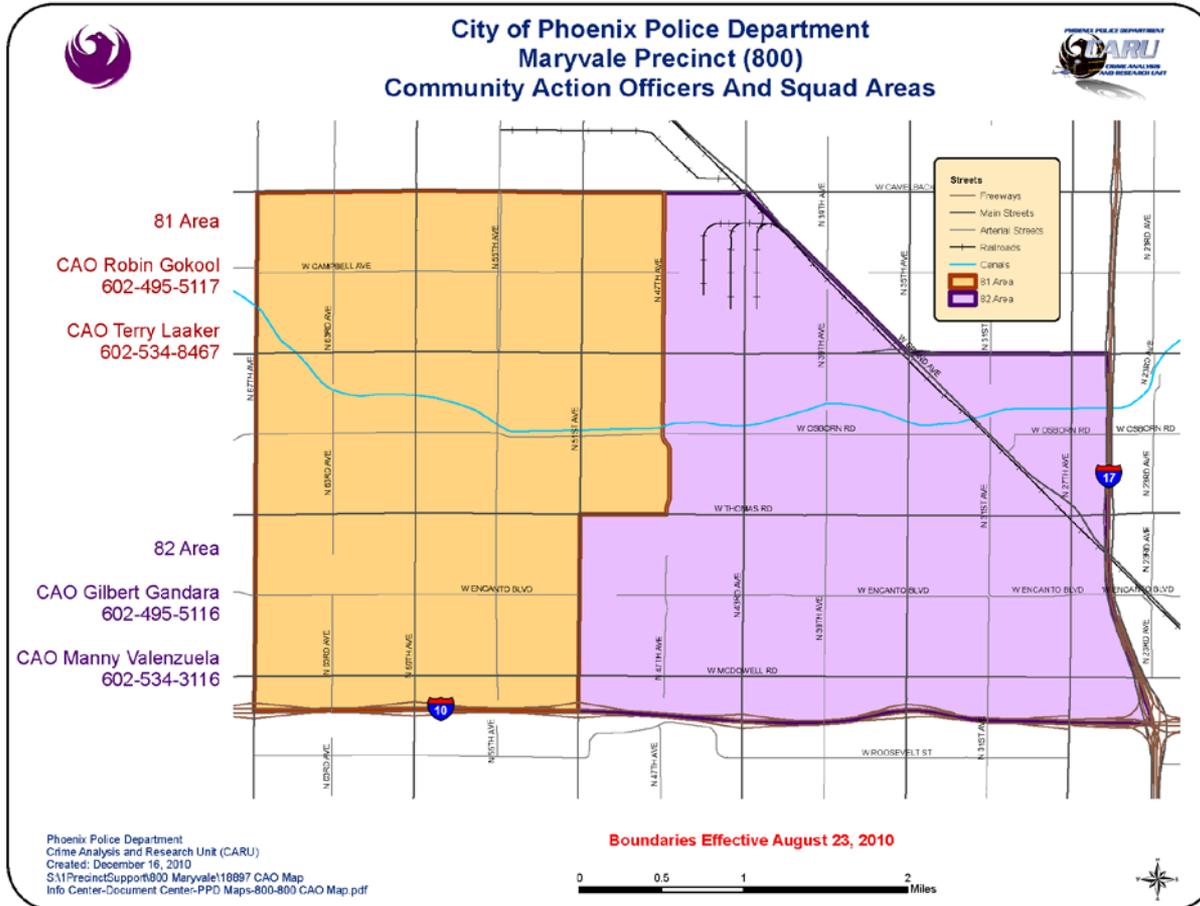
Increase police & public accountability

- 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

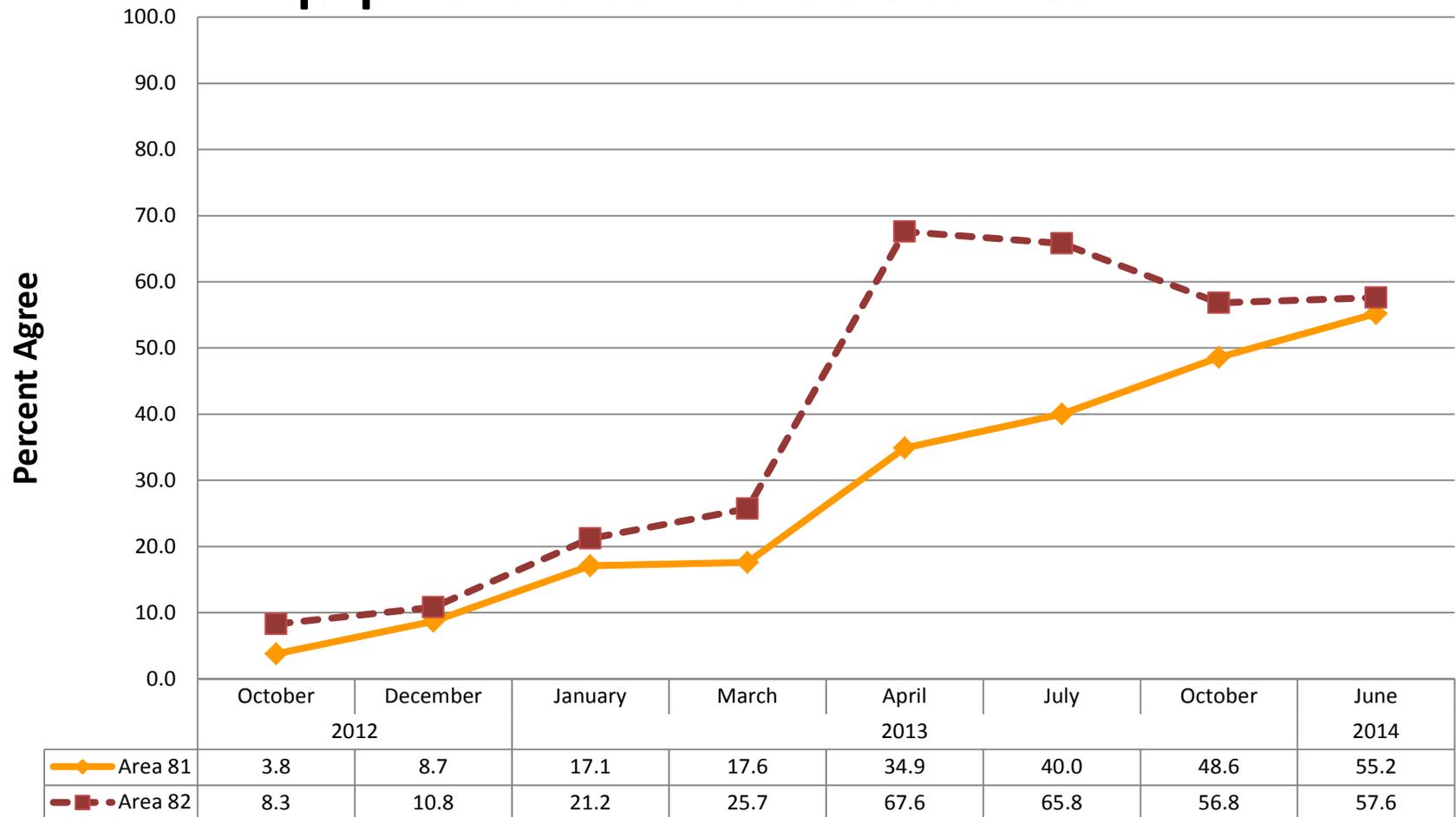
Maryvale Precinct



Quasi-experimental Design

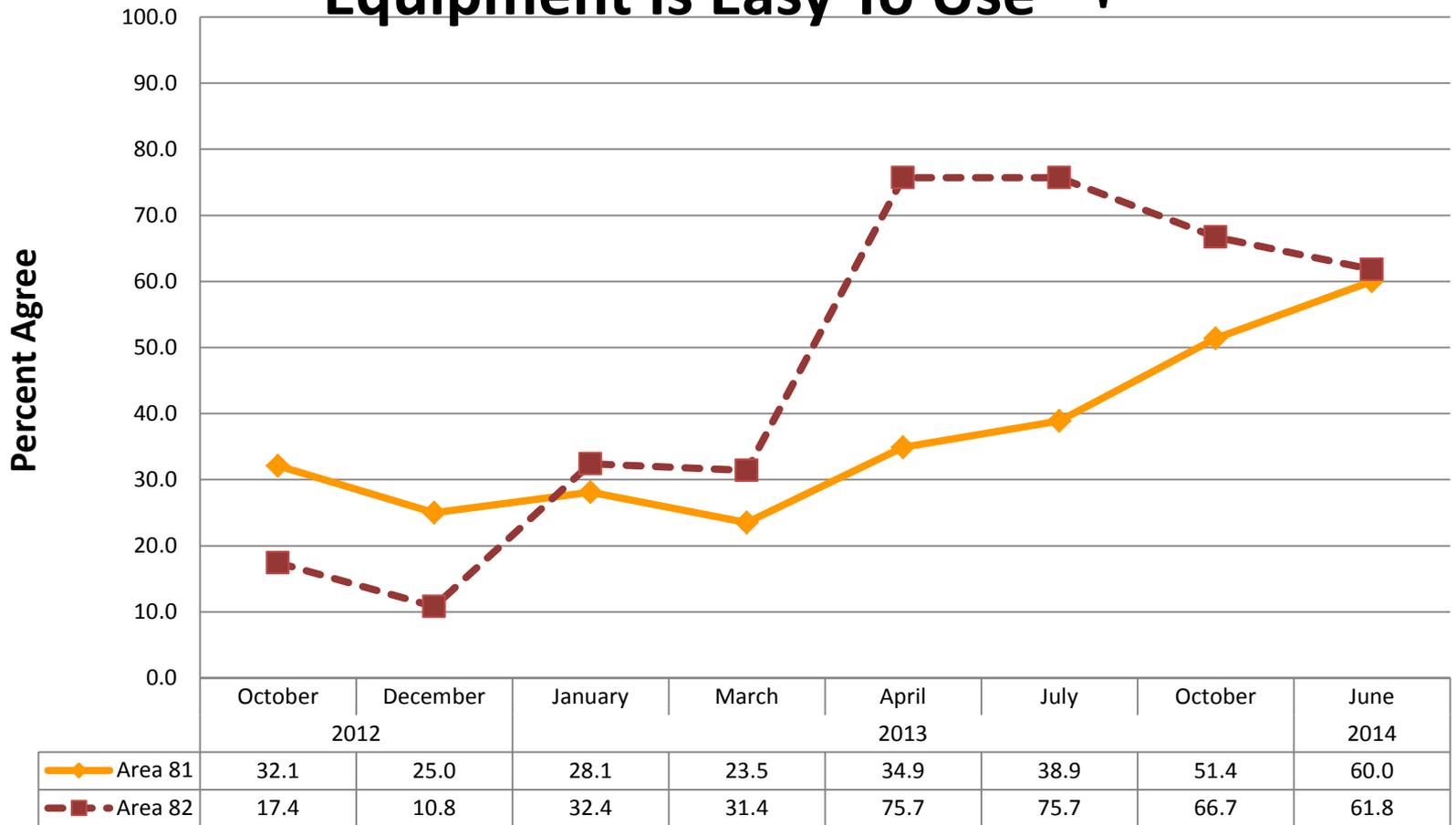
- Repeated measures from the below sources
 - Police/court data
 - Administrative records
 - Officer self-report surveys
 - Meta-data from cameras
 - Interviews with officers

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



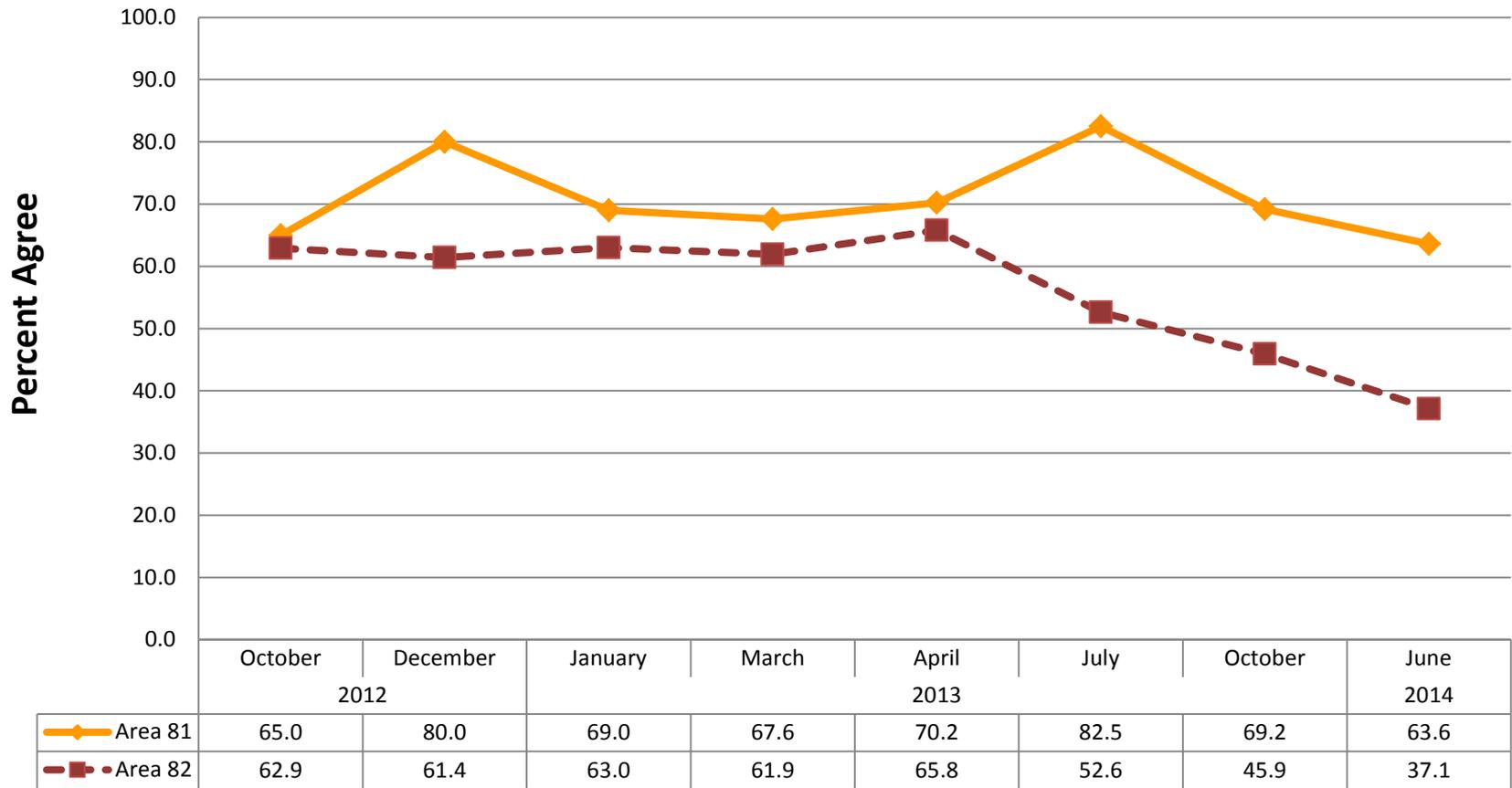
** Area 81-82 $p \leq .05$; † Pre-Post $p \leq .05$

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



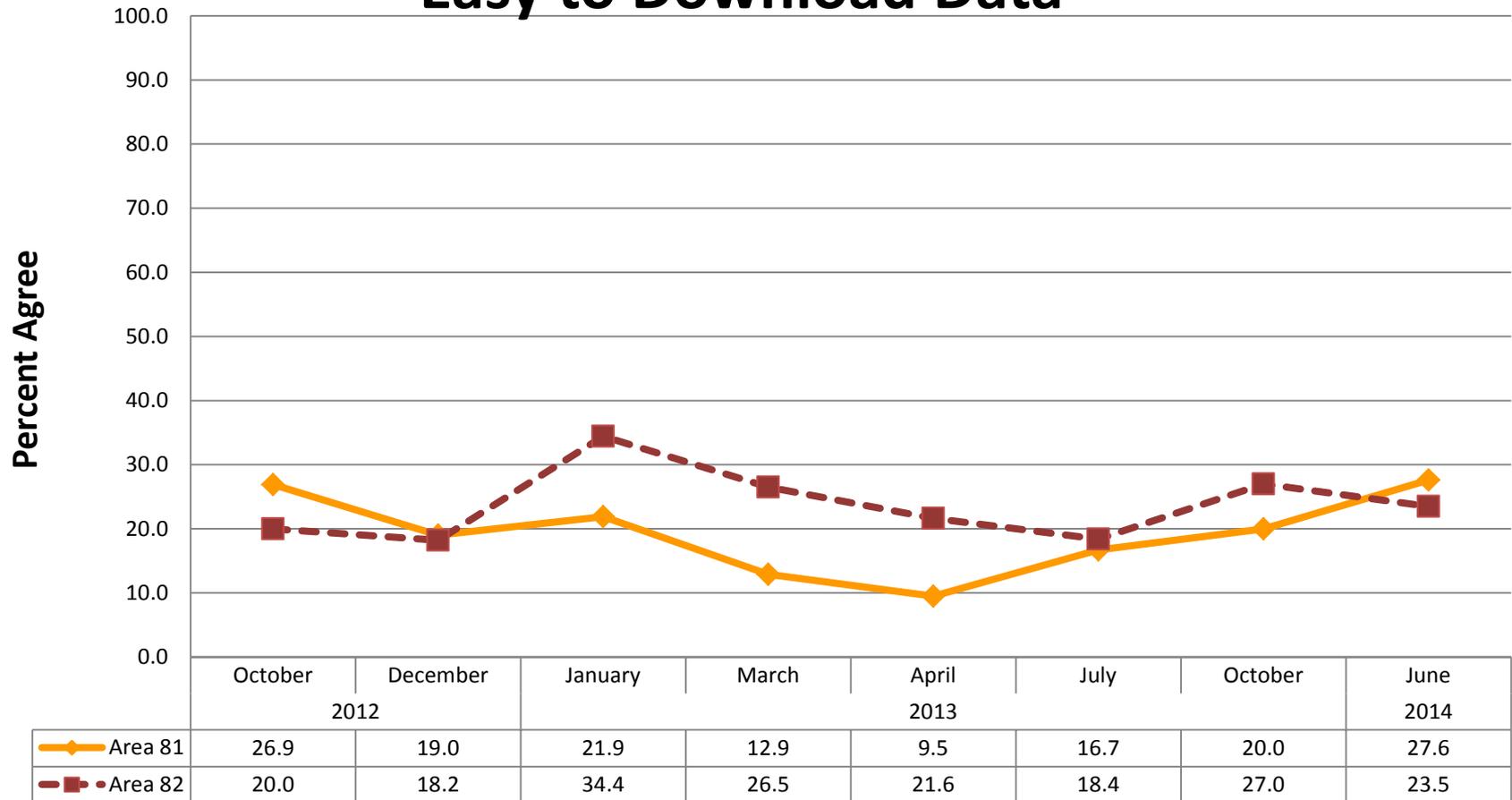
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Police Officer Behavior: Will Have Fewer Contacts With Citizens *



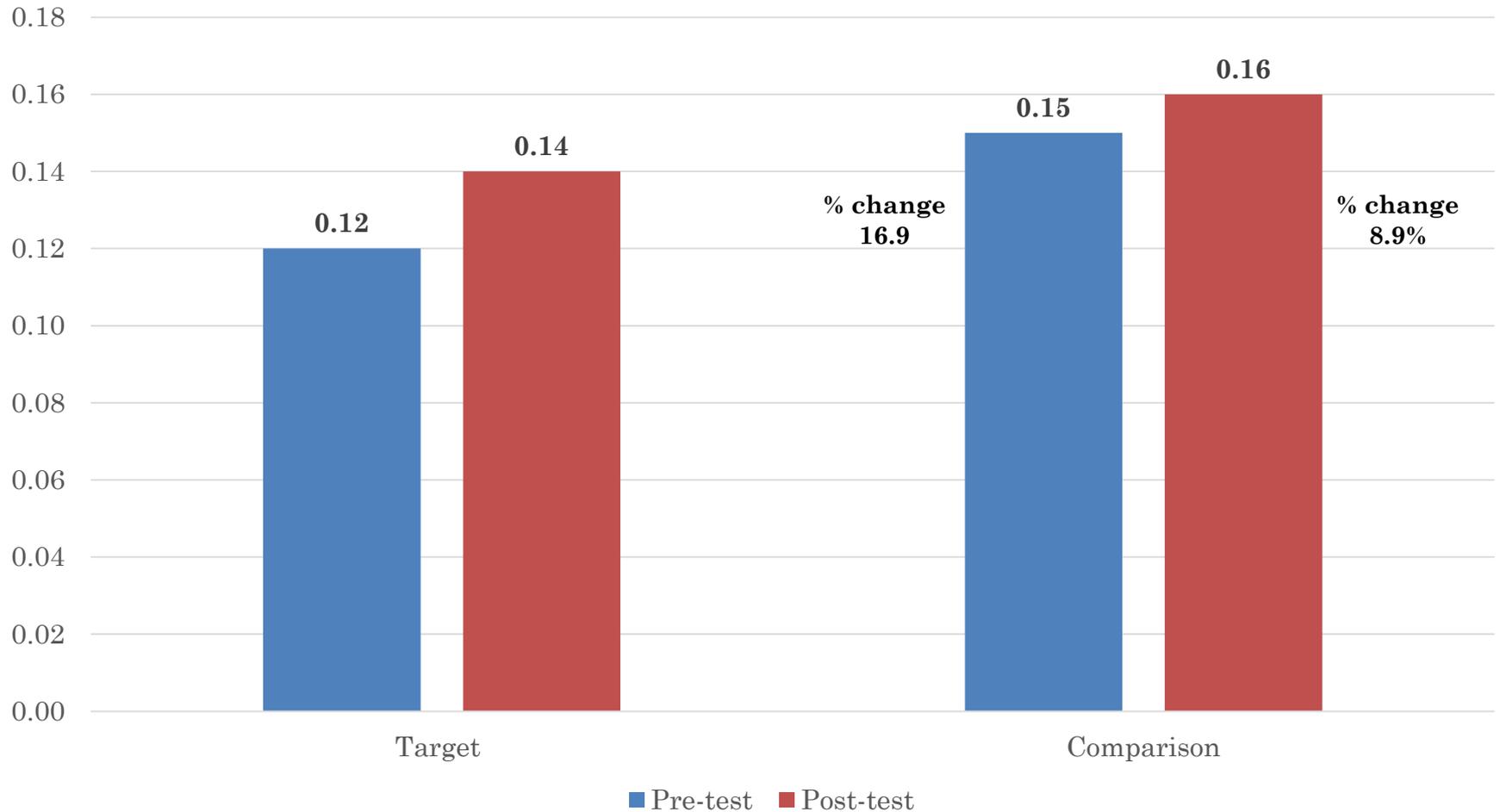
* * Area 81-82 $p \leq .05$; † Pre-Post $p \leq .05$

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

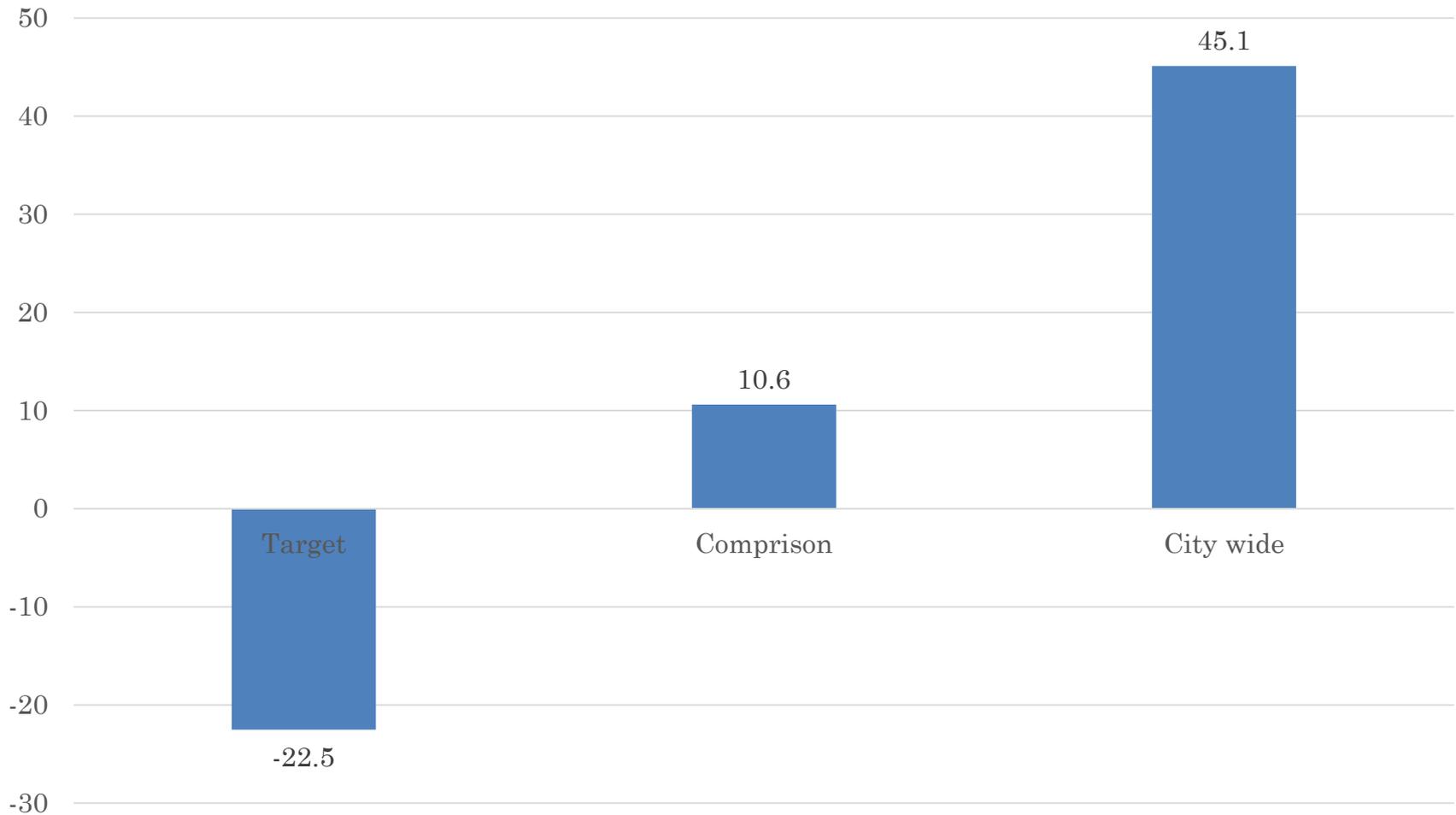


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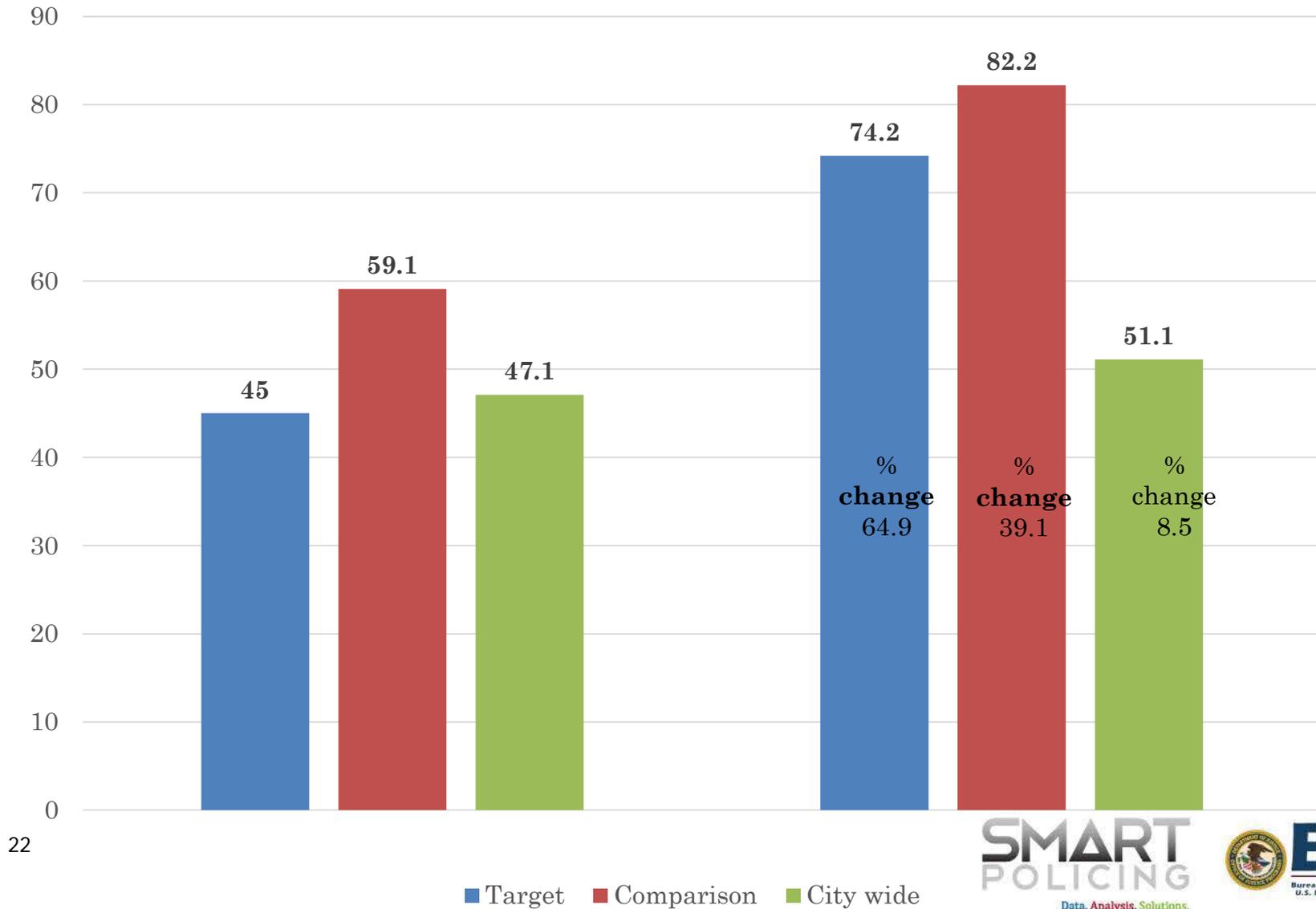
Productivity: Mean Number of Arrests



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?



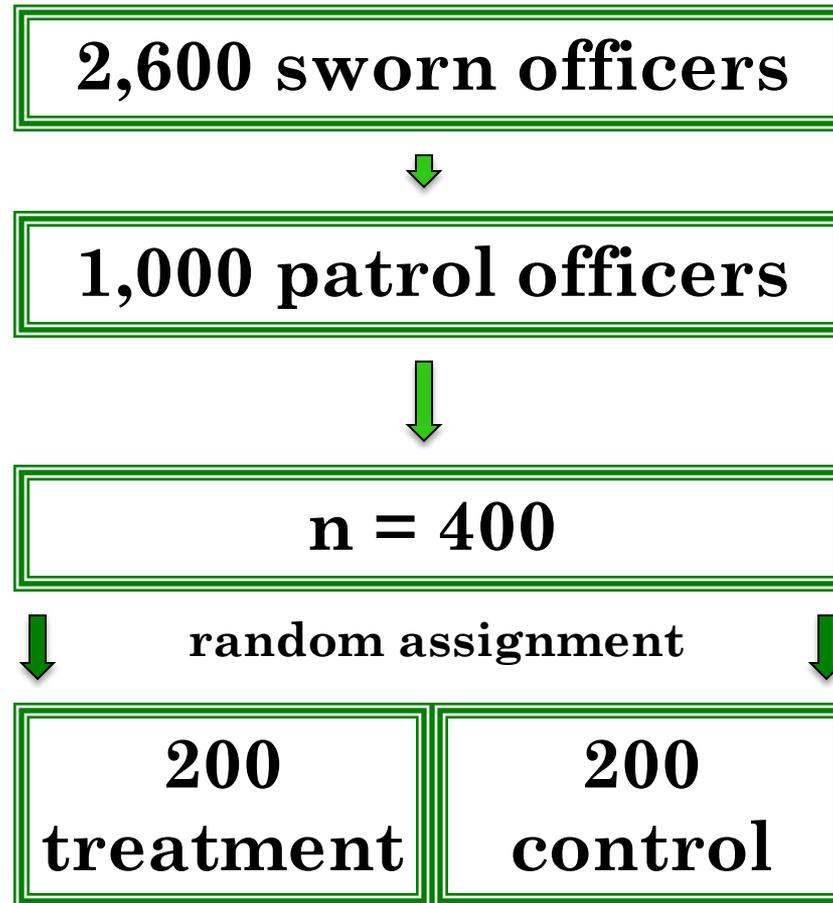
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Experimentation on Body Worn Cameras

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



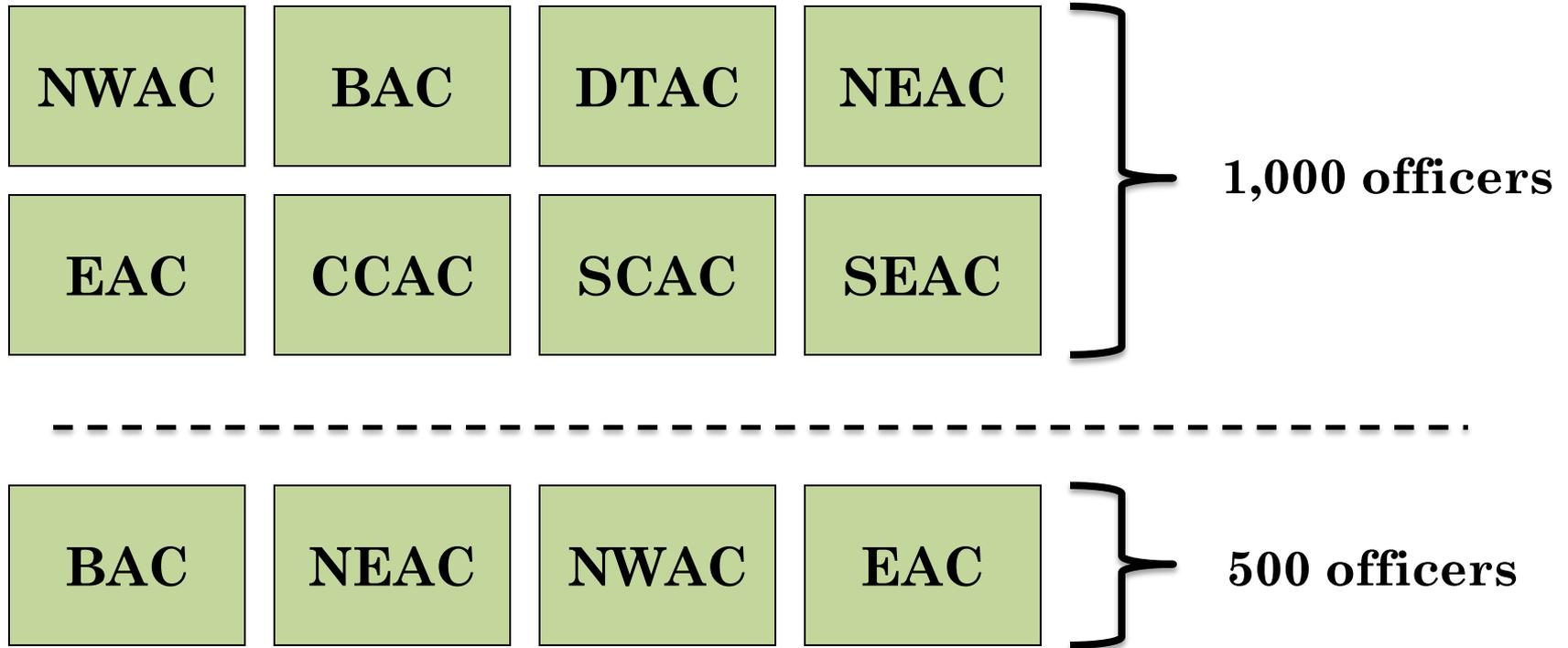
Officer concerns limit the number of subjects willing to participate

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

“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**

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**

Target # of Subjects

400

Subjects Recruited

389

The Sample: Opinion of Technology

	Comfort with Technology in General		Comfort with Policing Technology	
	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

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

Control and Treatment Participants

	Control Group		Treatment Group	
	N	%	N	%
<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.)