



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

Charles Katz, Mike Kurtenbach, David Choate, Justin Ready

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Results from a 5-minute Google Search for Body Worn Camera Sites



- Albuquerque, NM
- Cincinnati, OH
- Denver, CO
- Fort Worth, TX
- Las Vegas, NV
- Los Angeles, CA
- Lubbock, TX
- Mesa, AZ
- Minneapolis, MN
- New Orleans, LA
- New York City, NY (pending)
- Oakland, CA
- Orlando, FL
- Phoenix, AZ
- Salt Lake City, UT
- San Jose, CA

Webinar Learning Objectives

1. Understand the **basic facets** of body worn camera technology.
2. Discuss the **benefits** of body worn cameras.
3. Discuss **common concerns** about body worn cameras.
4. Review the **evaluation** of body worn cameras.



UNDERSTANDING THE BASIC FACETS OF BODY WORN CAMERA TECHNOLOGY

Variations in Body Worn Cameras

- Mounting
- Video resolution
- Video and audio format
- Still-photo capable
- Field of view (72-180 degrees)
- Night mode
- Playback screen
- Wireless
- Cost
- Video safeguards
- Pre-event record
- Event marking
- Battery type
- Recording life (1.5-12 hrs)
- Charging time (2-6 hrs)
- GPS
- Size, weight, etc.
- Police radio interface
- Vehicle mountable

The Hardware

- Camera
 - Head or body camera
 - User controls, push to record, touch screen controls
 - Video/audio feed and playback in field



Image from:

http://www.wolfcomusa.com/wolfcom_vision_police_body_worn.html

The Software

- Retrieval, storage, and management of video files
- Can be uploaded to an online web-based digital media storage platform
- Encrypted data
- Some have smartphone apps

Field Review Technology

1. Download video to VERIPATROL Watch, add details and review



2. VERIPATROL holds the video locally to allow for immediate review at no cost



3. After 1 hour, VERIPATROL transfers the video to the Cloud for permanent storage



Image from: <http://www.cloudmaxa.com/viewu.htm>

THE PERCEIVED BENEFITS OF BODY WORN CAMERAS



Perceived Benefits

- Increases transparency
- Cuts through divergent views of an incident
 - Protects against police misconduct
 - Protects against false allegations by the public
- Increases public confidence in the police
- Improves accountability
- Increases evidentiary quality
- Saves time
- Facilitates critical incident review
- Enhances professional development

Goals

- Decrease unjustified force
- Decrease false allegations against the police
- Increase confidence/trust in the police
- Decrease litigation costs
- Decrease time spent on report writing
- Increase civility of both the officer and citizen
- Expedite resolution of citizen complaints

Theoretical Premises

1. Socio-cognitive reaction: being observed typically affects behavior in a positive way
2. Deterrence theory: swift, certain, severe
 - Specific deterrence
 - General deterrence
3. However, research suggests people revert back to old behaviors*

*Ariel, Barak (2013). Tracking police performance. Unpublished manuscript.



CONCERNS ABOUT BODY WORN CAMERAS

Common Concerns

- Privacy of the public
 - Enter people's homes and record them at their worst (e.g., victims, suspects, bystanders)
- Privacy of police officers
 - Might be used by supervisors against whistle-blowers.
- Officer health and safety
 - Equipment harming officer
- Requires substantial investment in training, policy development, and product acquisition
- Logistical requirements

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ARIZONA STATE UNIVERSITY

Center for Violence Prevention and Community Safety

City Manager Task Force

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

Targeted Problems

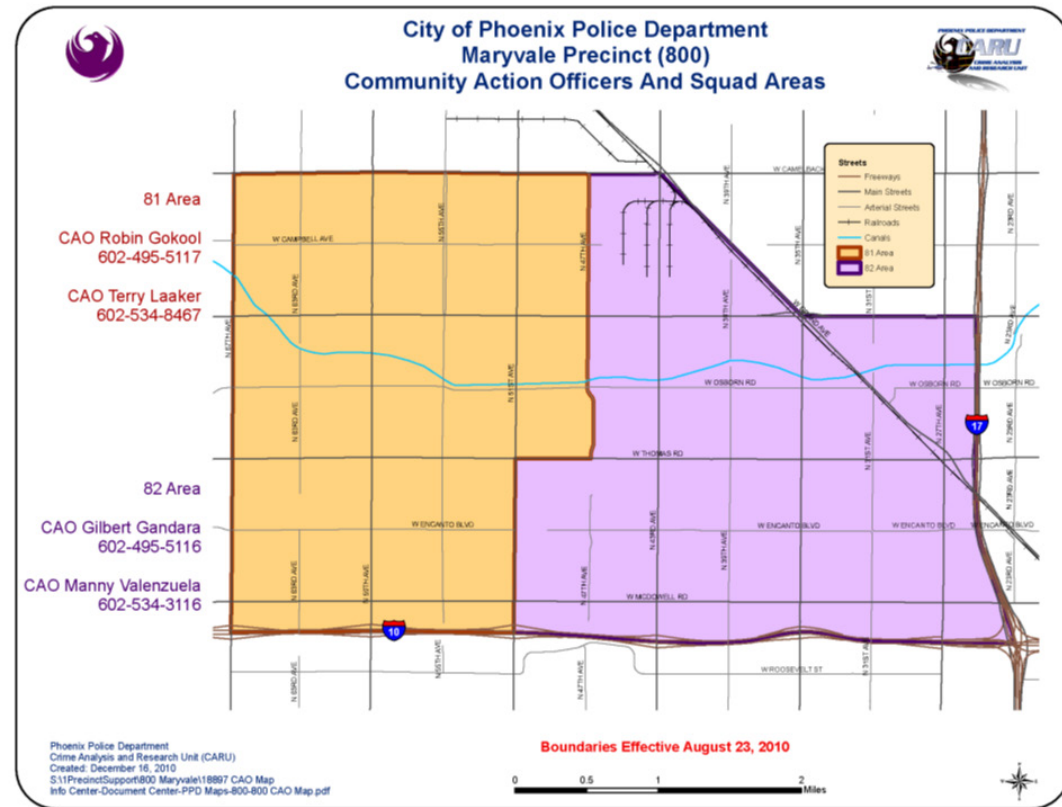
- Violence in general has declined in Phoenix, but domestic violence has remained problematic
 - Approximately 40,000 incidents of domestic violence are dispatched per year
 - Domestic violence is one of the top five call types
- Shift in relationship with residents
 - Police community relations are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

The Technology

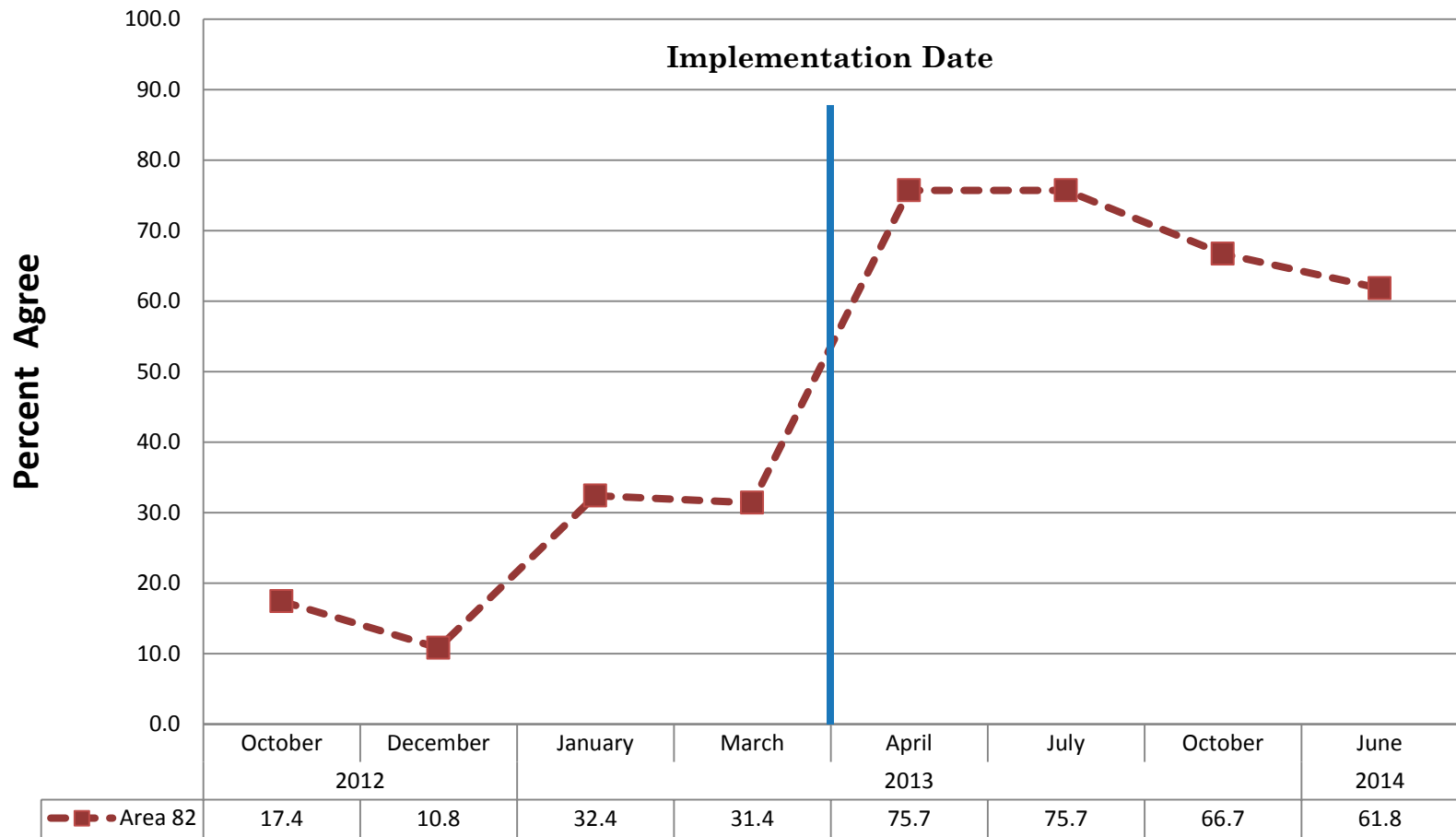
- Selected Viewu
 - Self-contained device worn on the torso
 - Size of a pager
 - Docking station
 - Uploaded to Phoenix Police Department servers

Quasi-Experimental Design

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

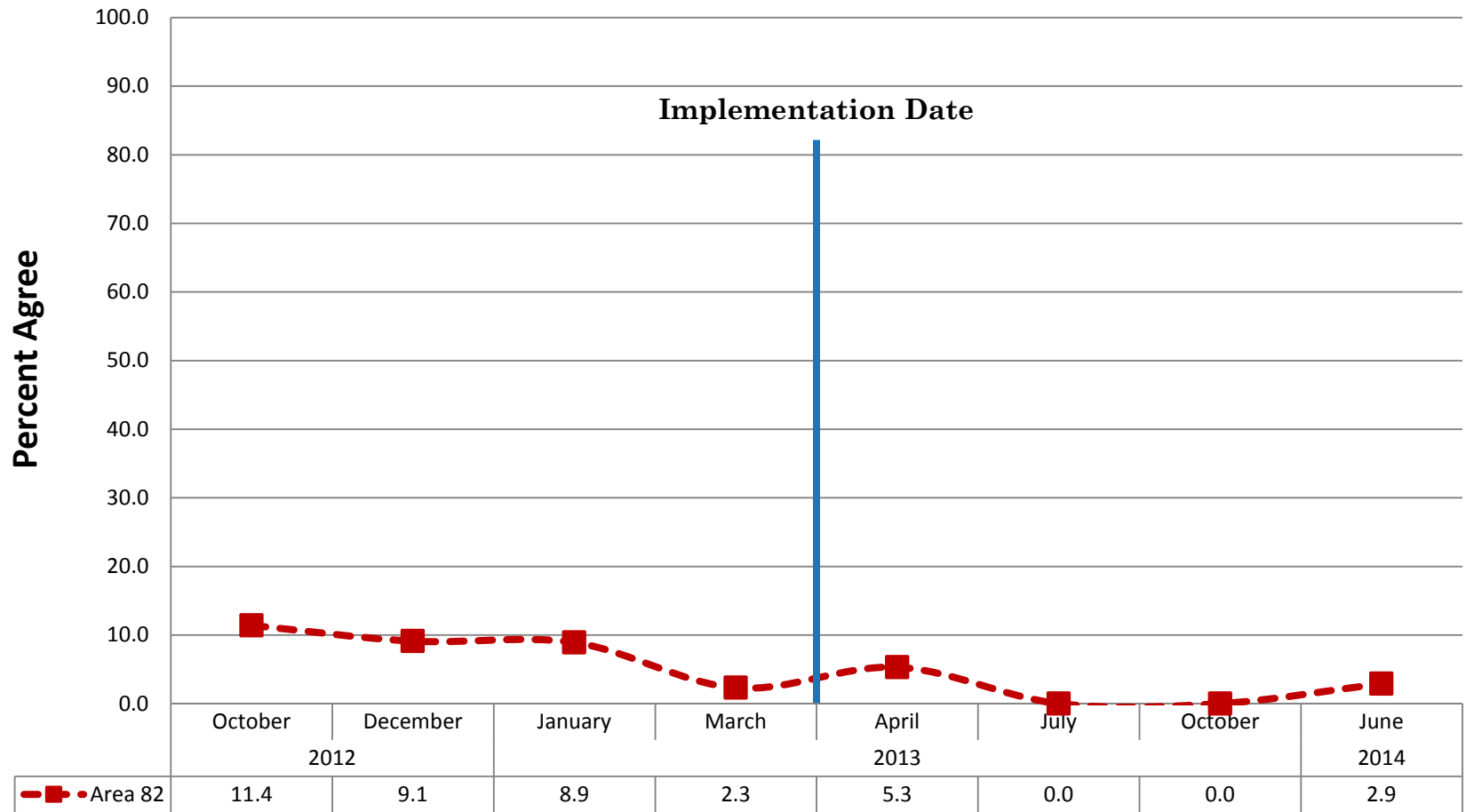


Equipment Is Easy to Use



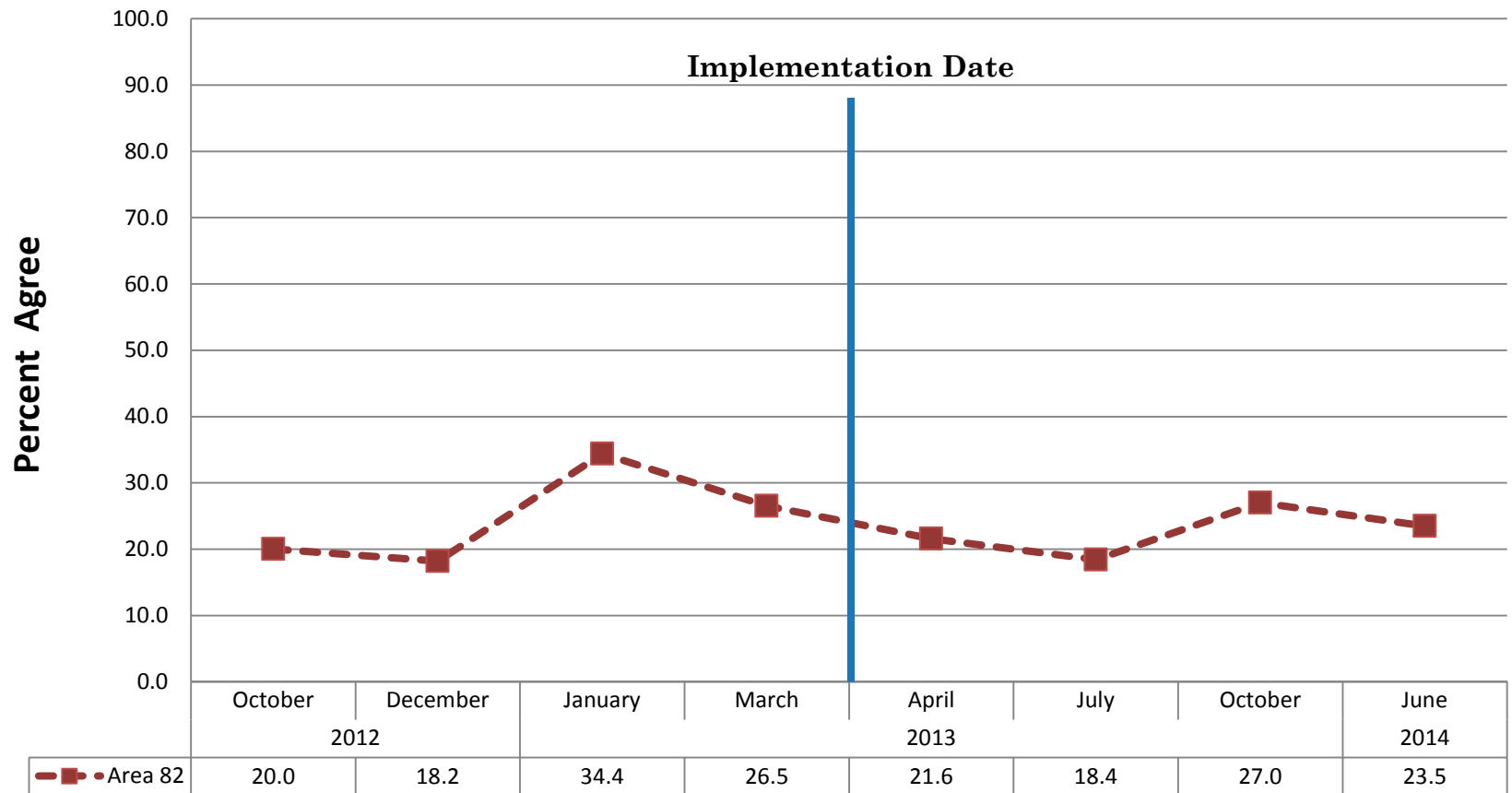
Key takeaway: After implementation, officers found the cameras easier to use than they expected.

Incident Reports: Less Time Spent On Paperwork



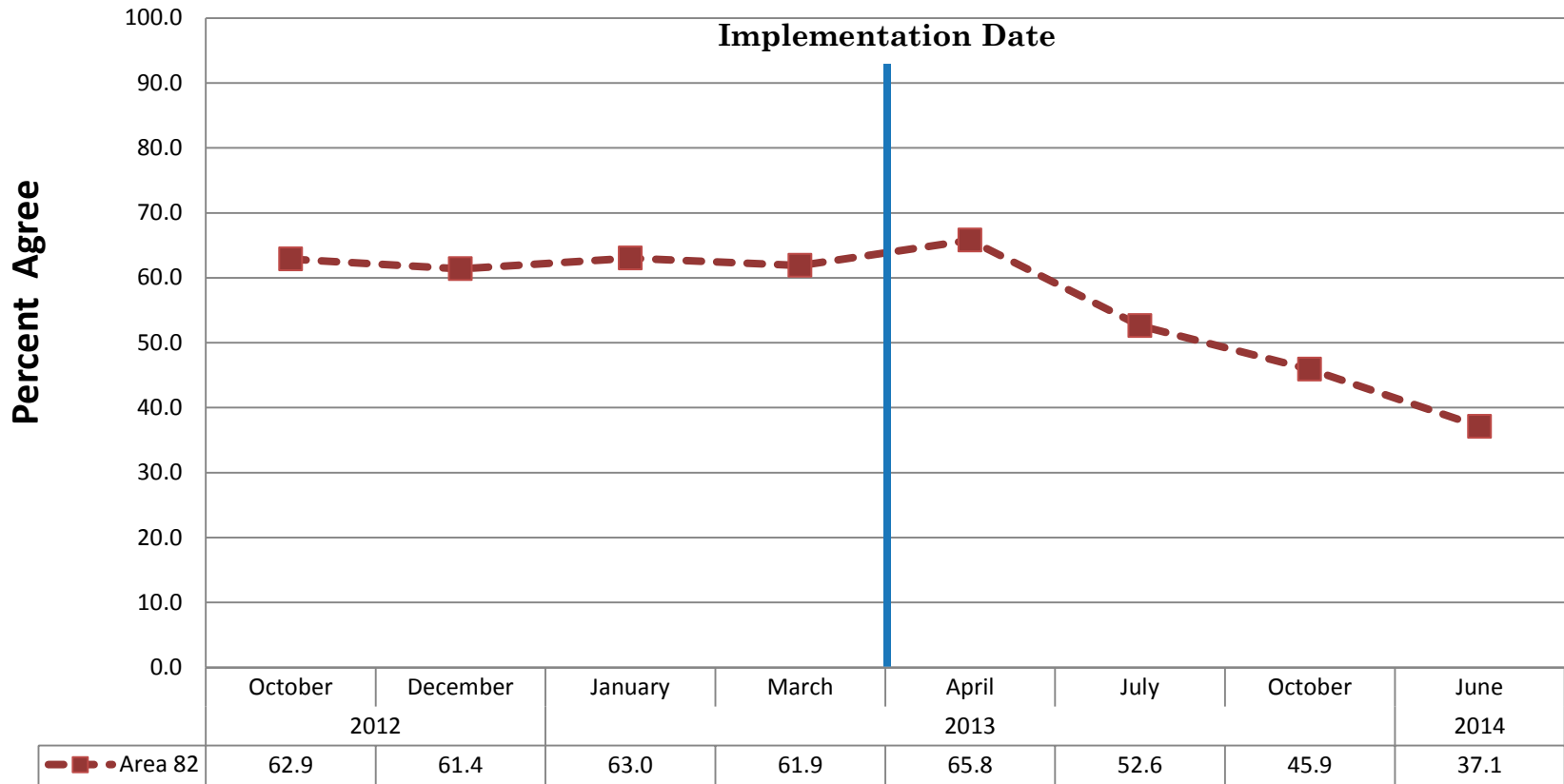
Key takeaway: Camera implementation did not decrease the time officers spent on paperwork.

Easy to Download Data



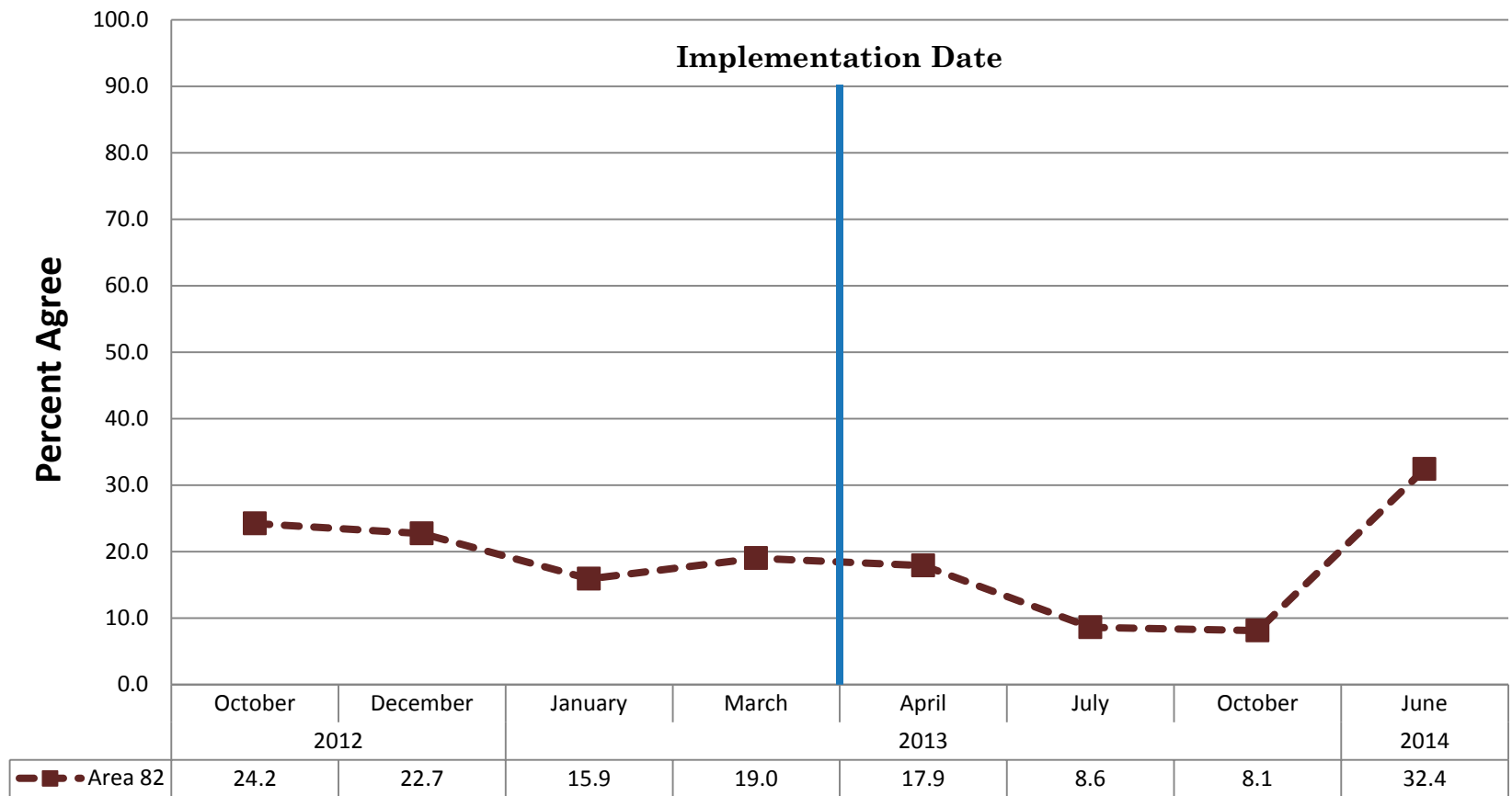
Key takeaway: After implementation, officers were slightly less likely to agree that downloading data was easy.

Will Have Fewer Contacts With Citizens



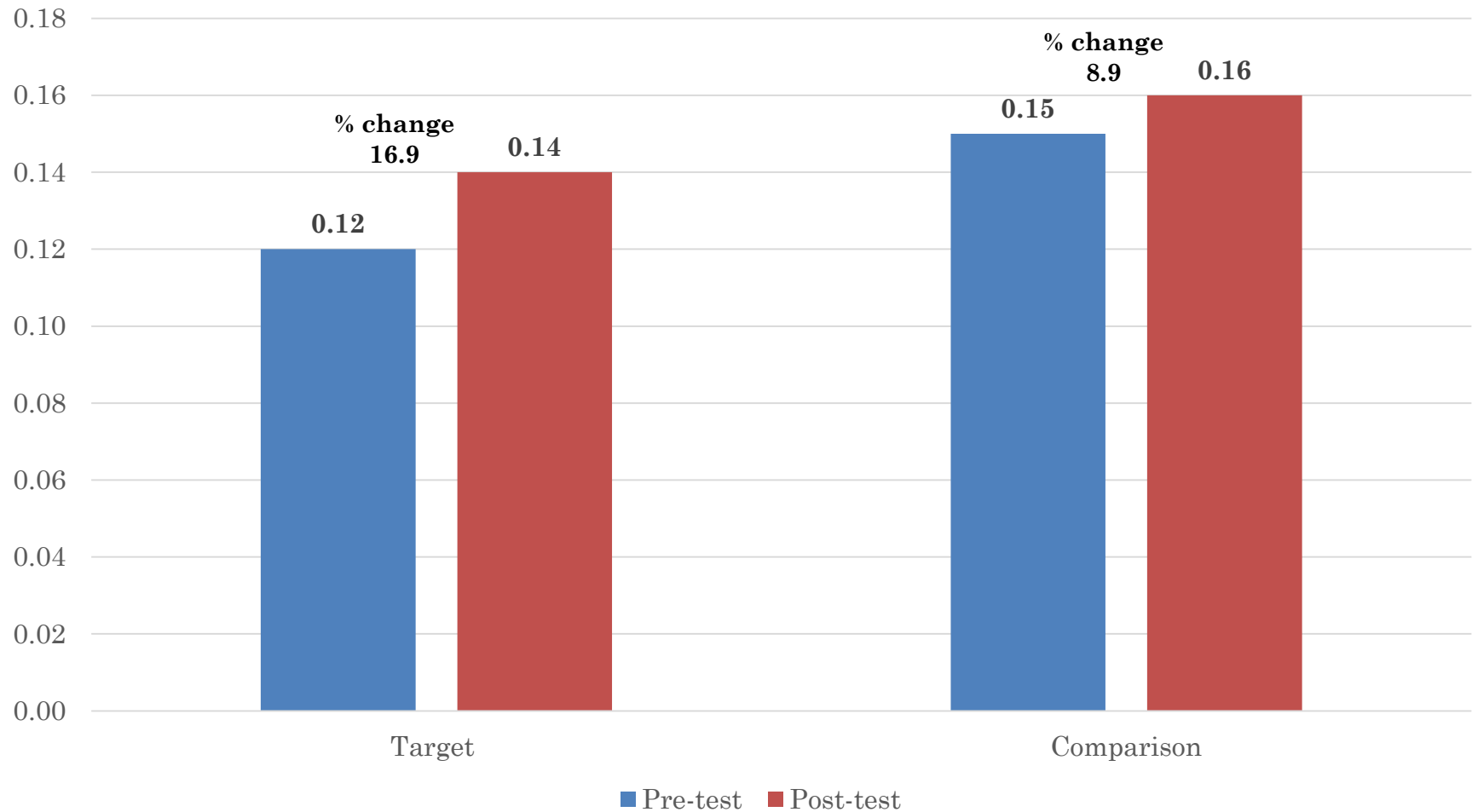
Key takeaway: Prior to implementation, officers felt that camera use would lead to decreases in their contact with citizens, but after implementation, the level of agreement with that statement steadily declined.

Cameras Should Be Expanded to Other Departments

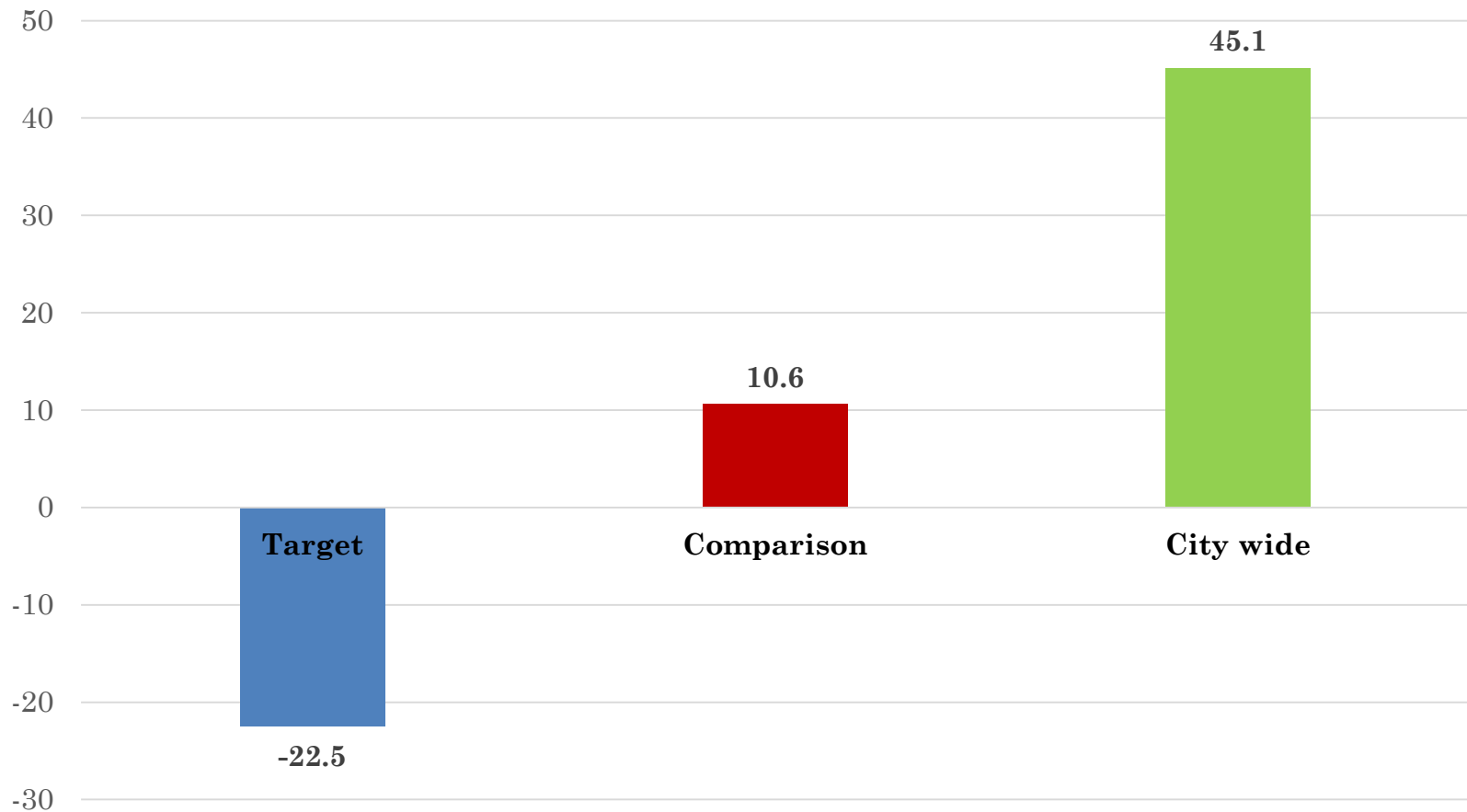


Key takeaway: Officers were more likely to agree camera use should be expanded into other departments after several months of implementation.

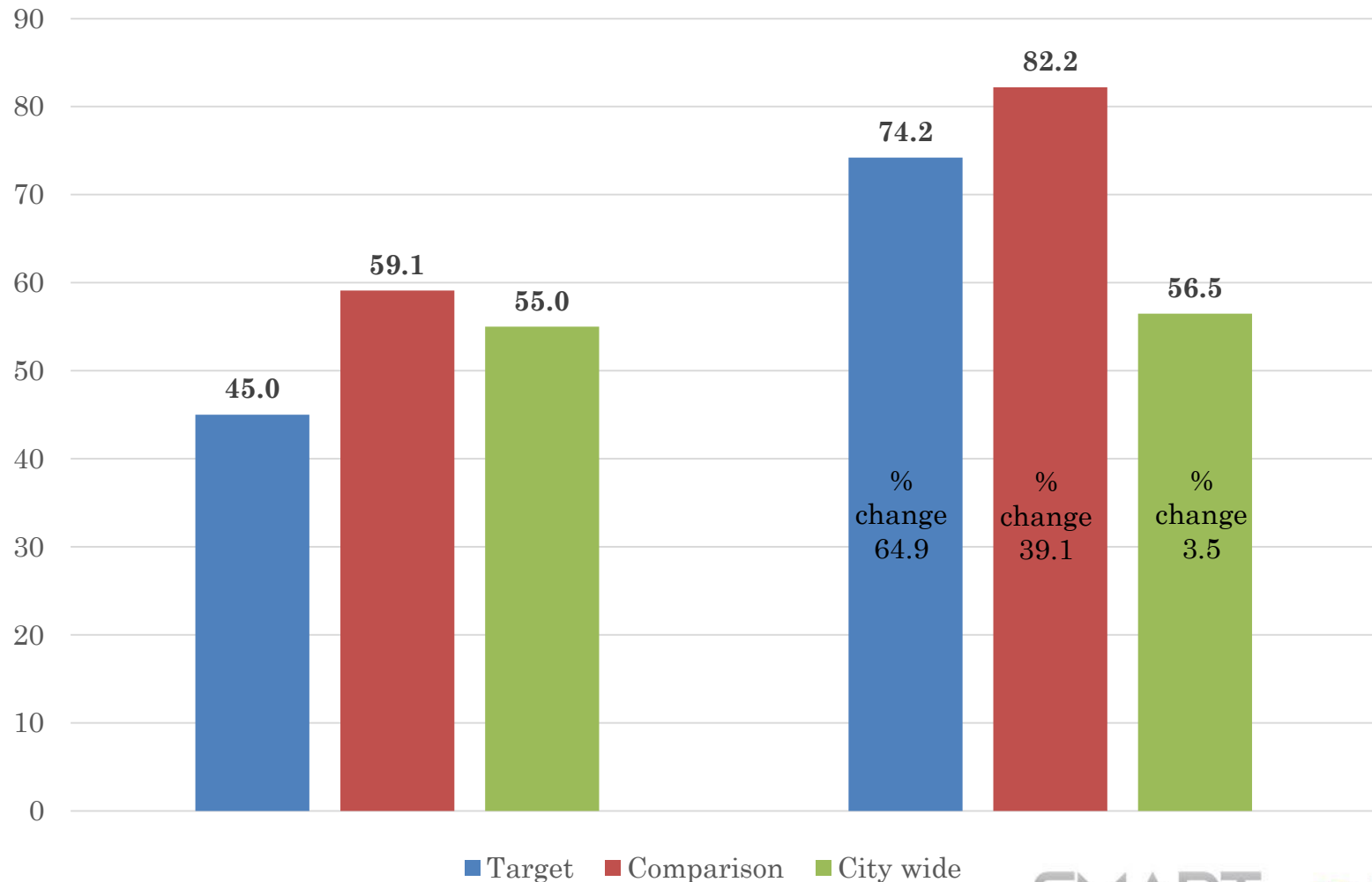
Productivity: Mean Numbers of Arrests



Percentage Change in Complaints Before and After Body Worn Cameras



Percentage of Complaints That Are Unfounded



Use of Body Camera Evidence in Court for Domestic Violence Offenses

- Investigator use
- Evidence storage (information technology)
- Prosecutor tracking and review
- Court liaison officer

Domestic Violence (DV) Case Flow

Pre & Post Camera Deployment

	Pre-Test Case		Post-Test Comparison		Post-Test Camera	
	n	%	n	%	n	%
Number of DV-Related Contacts ^a	878	100.0	933	100.0	252	100.0
Cases Initiated	369	42.0	320	34.3	103	40.9
Charges Filed	333	37.9	243	26.0	90	37.7
Case Furthered (Not Dismissed)	131	14.9	58	6.2	32	12.7
Plead Guilty	27	3.1	11	1.2	11	4.4
Guilty at Trial	25	2.8	9	0.9	11	4.4

^a The number of contacts is derived from the DV pocket cards, which included data on 2,063 unique incidents from January 1, 2012, through July 31, 2014, from the Maryvale Precinct.

Case Processing Time

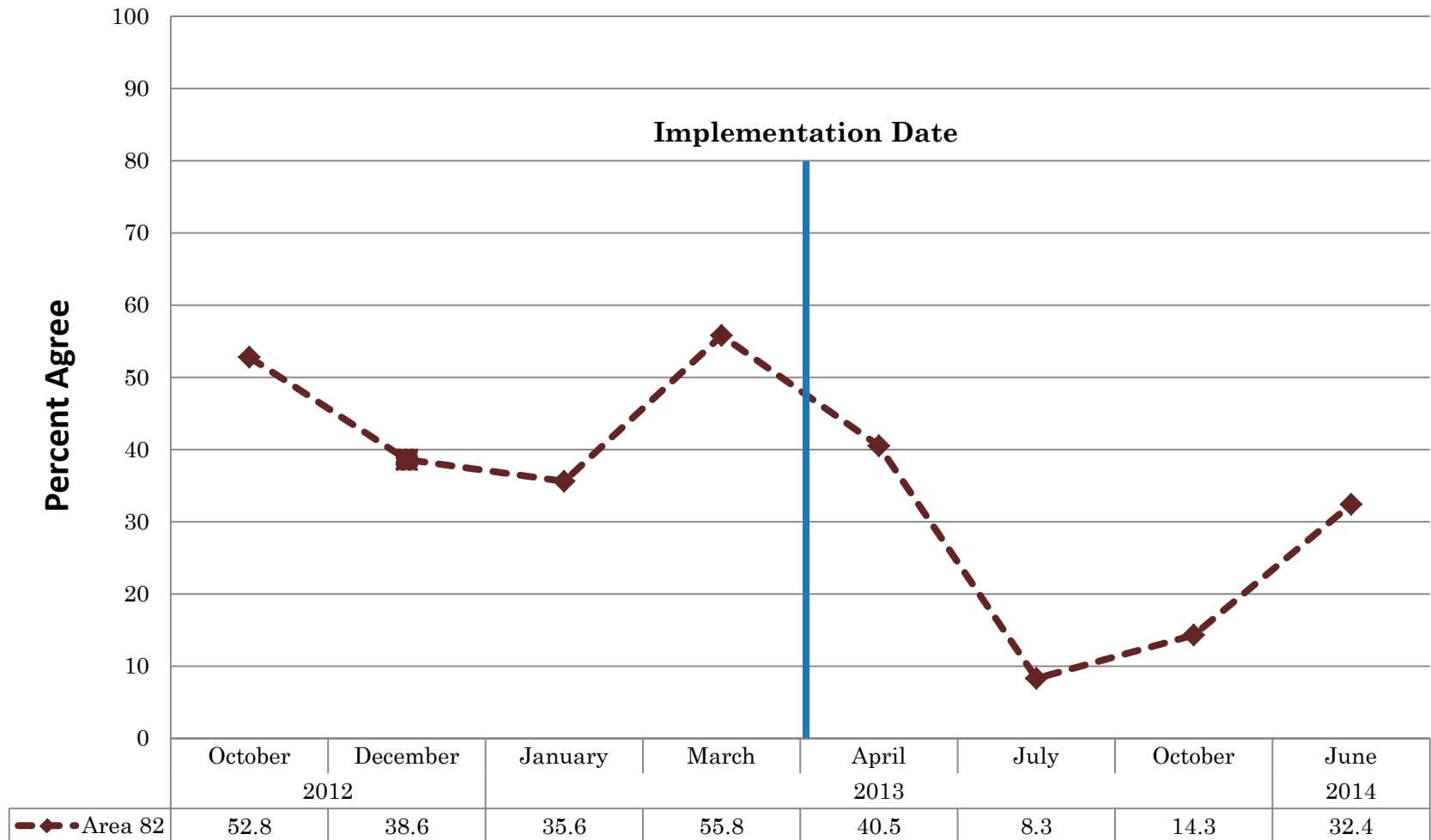
Number of Days to Process Case to Disposition (N=795) †

	Pre-Test Case			Post-Test Comparison			Post-Test Camera		
	mean	SD	n	mean	SD	n	mean	SD	n
All Completed Cases *	95.8	124.30	340	43.5	77.50	266	78.1	105.10	92
Dismissed *	65.3	91.00	201	38.2	67.80	184	56.1	65.90	58
Plead Guilty *	167.7	157.57	104	71.3	100.44	46	131.9	156.40	21
Trial	74.4	90.61	27	114.2	125.06	11	105.5	126.07	11

* Significant at $p \leq 0.05$

† Original values ranged from 0 to 756. Values above the 98th percentile of 438 days (n=16) were truncated to 438 to control for outlier cases.

Easier To Prosecute DV Offenders



Conclusions

Strengths

- Decrease in complaints
- Increase in unfounded incidents
- Increase in arrests (+/-)
- Prosecution of domestic violence

Challenges

- Officer resistance
- Information technology costs
- Increase time spent on officer paper work
- Prosecutor capacity
- Redaction



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