

RESEARCH IN BRIEF

Public Attitudes about UAV Usage in Police Work: A Comparative Case Study of Mesa County Residents

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The Mesa County Sheriff's Office in Colorado has received national attention for its use of aerial drones in domestic policing activities. Unmanned aerial vehicles (i.e., UAV's or "drones") have been used in this jurisdiction in various types of policing activities (e.g., search/rescue, crime scene photography).

Given Mesa County Sheriff's Office's national visibility and experiences with using UAVs, a telephone survey of Mesa County residents was conducted to assess their general attitudes about aerial drones in different areas of policing. Similar questions about aerial drones and policing were also asked in a recent national online survey, permitting comparisons of the findings across local and national boundaries.

The methodology used in these two surveys, the research questions underlying them, and the obtained results are summarized below.

Methodology

A telephone survey on aerial drones and police activities was given to a sample of 200 adult residents of Mesa County. The survey was administered by Survey Sampling International (SSI) and conducted between August 27 and September 11, 2015. Respondents were derived from a random sample of landline users (n = 120) and wireless/cellphone users (n = 80). Given the sample size (n = 200) and random selection of potential respondents from these two sampling frames, this survey has a margin of error of $\pm 7\%$.

The observed survey similarity between our sample's demographic attributes and U.S. Census estimates for Mesa County provides empirical support for our

HIGHLIGHTS

- Public support for using aerial drones in police work is substantially greater in Mesa County than nationally.
- Highest support for UAV use among Mesa County residents involves search and rescue, tactical operations, and crime scene investigations.
- Mesa County residents are more supportive of using aerial drones to monitor crime in public places than national respondents.
- Mesa county residents are far less likely than the national sample to have concerns about police use of UAVs violating their personal privacy.
- One explanation for greater UAV support in Mesa County is that there are higher levels of public trust and perceived effectiveness of police in this county than is found in current national polls.

substantive inferences about public attitudes about aerial drones and policing in the region (see Table 1). In this report, we compare the responses of Mesa County residents to the results of a recent national survey about aerial drones and police activities. However, the national sample differs from the Mesa County sample in terms of its broader population scope, the date of implementation (May 7-17, 2015), and sample characteristics (e.g., national respondents are more likely to be younger, Democrats, non-White, and urban residents). Thus, direct comparisons across these two samples should be interpreted with appropriate caution.

Research Focus

The primary purpose of the Mesa County survey was to explore the level of public support for UAV usage for various types of police work. Assessing public attitudes of adult residents of this county is important for both Mesa County and other jurisdictions considering the wider use of drones within domestic policing operations. Comparing these attitudes to national patterns also provides a context for exploring areas of support and opposition for this technology across local and national domains.

Table 1: Comparison of Demographic Attributes between the U.S. Census in Mesa County and the Current Sample

Demographic Attributes	Sample (2015)	U.S. Census (2014)
Female	50%	50%
White	88%	82%
Income<50K	57%	51%
Republican	57%	65%
	N=200	N=148,000

Public Support for UAVs in Policing Activities

Specific questions were asked in both the Mesa County and national survey about public support for UAV use in different areas of policing. Figure 1 summarizes these results for each sample and a subsample of the national survey of respondents who live in smaller cities and towns similar in size to Grand Junction and other inhabited areas of Mesa County.

Figure 1: UAV Support by Policing Activities and Sample (% Support)			
Policing Activity	Mesa County	National	<50k City/Town
Search and Rescue	89.5%	92%	90.9%
Tactical Operations	82%	74.5%	74.2%
Crime Scene Investigation	70%	74.8%	74.1%
Highway Monitoring	59.5%	76.5%	77.2%
Monitor Crime in Public Places	61.5%	44.7%	45.7%
Average Support for All Activities	72.5%	72.4%	72.4%

Mesa County residents voiced their highest level of support for UAV usage in the areas of search and rescue (90%), tactical operations (82%), and crime scene investigations (70%). The clear majority of these local residents also supported UAV use in monitoring criminal activity in public places (62%) and traffic monitoring (60%).

When compared to the national sample, Mesa County’s average level of support for aerial drone use across these policing activities (72%) is virtually identical to the national pattern and the subsample of national residents of non-metropolitan cities/towns. Among the specific policing areas, Mesa County residents were far more supportive of using aerial drones in monitoring crime in public places (62% vs. 45%). No other major differences in UAV support were found across the samples.

Figure 2: Public Views of UAV Use in Policing (% Agree)

Police Use of Aerial Drones Increases Public Safety...	
Mesa County Sample	69.5%
National Sample	37.3%
Small City/Town National Subsample	35.3%
Police Use of Aerial Drones is a Valuable/Effective Technology...	
Mesa County Sample	78.5%
National Sample	48.1%
Small City/Town National Subsample	46.5%
Police Use of Aerial Drones is a Violation of Personal Privacy...	
Mesa County Sample	52.5%
National Sample	65.6%
Small City/Town National Subsample	70.1%

Perceived Benefits and Costs of UAV Use in Policing

Respondents in each survey were asked their views about aerial drones increasing public safety, being effective/valuable in police work and violating personal privacy.

As shown in Figure 2, Mesa County residents have far more positive views about UAV usage in policing activities than national respondents. Over three fourths of Mesa County residents agree that police use of drones is a “valuable technology in police work” and about 70% viewed aerial drones as increasing public safety.” This level of perceived benefits of drone use in policing was over 30 percentage points higher than found in the national sample for each of these factors.

In terms of privacy issues, Mesa County residents were less likely to have concerns about personal privacy and UAV usage by police than the national sample. A slight majority (53%) of Mesa County residents agreed with the statement that police use of aerial drones is “a violation of personal privacy.” In contrast, about two-thirds of the respondents in the national sample agreed with this statement. The national subsample of smaller city residents had even higher levels of concern (70%) about drones and privacy.

Public Attitudes about Local Police

Previous research (Lieberman et al., 2014; Sakiyama et al., 2016) indicates that public attitudes toward the police and various policing activities depending in large part on the level of public faith and trust in police. The term “legitimacy” is often used to capture this general concern about the fairness and effectiveness of police and their activities.

From the police legitimacy perspective, the higher level of support for UAV usage in Mesa County than nationally may be due to greater feelings of police effectiveness and fairness in this county. Data from our surveys and other studies provide some preliminary evidence to evaluate this explanation for the observed difference in UAV support across these local and national settings.

As shown in Figure 3, the vast majority of Mesa County respondents rated their local police department as “excellent” or “good” across various areas of police activity. Ratings for local police were highest for “maintaining law and order in the

Figure 3: Public Opinions About Local Police Department in Mesa County

Policing Activity	% Rated "Good" or "Excellent"
Maintaining Law and Order in the Community	76%
Protecting and Serving the Public	75%
Treating Everyone with Dignity and Respect	72%
Being Fair and Impartial	69.5%
Keeping Residents Informed About Public Safety	66%
Average Support for All Activities	71.8%

community” (76%) and “protecting and serving the public” (75%). Respondents also strongly believed that their local police treated everyone with “dignity and respect” (73%) and were “fair and impartial” (70%). Even in the least positive area (“keeping residents informed about public safety”), about two-thirds of Mesa County residents rated their local police as good or excellent.

Although specific comparisons across samples are not possible (because of differences in questions wording), national survey results indicate far less public support for police and police activities. For example, less than 50% of national sample respondents had favorable ratings of the police in the following areas:

- Forty-five percent agreed with the statement “I have great respect for the police.”
- Forty-three percent agreed with the statement “police do their jobs well.”
- Forty-three percent indicated that police are doing a good job “preventing crime in their neighborhood.”
- Forty-two percent indicated that police are doing a good job “dealing with the problems that really concern people in their neighborhoods.”
- Forty-two percent agreed with the statement “I have confidence in the police.”

- Thirty-five percent indicated that police are doing a good job in their neighborhood “working together with residents to solve local problems.”

Given these relatively low ratings of police performance in this national survey, differences in perceptions of police legitimacy may ultimately help explain the greater public support for UAV use by local police in Mesa County. The specific mechanism by which wide public support for UAV technology has been achieved in this county cannot be established in this particular study. Nevertheless, by being perceived as effective and fair in their daily work activities, local police in Mesa County may have gained the public trust necessary for implementing UAV technology without the extensive public outcry about privacy issues that has occurred in other locations (e.g., Seattle and Los Angeles) and found in other studies and commentaries (Clarridge, 2013; Sakiyama et al., 2016; Serna, 2014).

Conclusion

The results of this report provide empirical confirmation for many of the positive media accounts of the Mesa County Sheriff Office’s UAV activities. Coupled with the changes over time in its areas of application, the Mesa County Sheriff’s Office’s experiences with UAV technology offers an interesting and important location for a more detailed comparative case study. We strongly encourage other researchers and policy analysts to expand this study.

Despite the concerns about non-response bias and sampling error inherent in survey research, three general conclusions from this study can be made:

First, Mesa County residents are more supportive of using UAV technology for most policing activities than are respondents in our national survey and other studies. Mesa County respondents’ public views about UAV use for monitoring criminal activity in public places were especially more supportive than national respondents’ (62% vs. 45%).

Second, compared to our national sample, Mesa County residents perceived a far greater level of benefits for UAV use in police work and lower social costs in using this technology. For example, about 70% of Mesa County residents believed that UAV use would “increase public safety” compared to only about 37% among the national respondents. Beliefs that police use of UAV technology “violates personal

privacy” were far less common in Mesa County (52%) than in the national sample (66%).

Third, Mesa County respondents had substantially higher ratings on measures of police legitimacy (e.g., police effectiveness, confidence/respect) than found in the national survey. Based on previous research on police legitimacy, it is a reasonable inference that the more positive appraisals toward police in Mesa County are an important factor underlying public support for the use of UAV technology.

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